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ACETAZOLEAMIDE (DIAMOX) IN SICKLE CELL DISEASE*

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IN A RECENT PAPER, Hilkowitz presents evidence that acetazoleamide inhibits sickling of red cells *in vitro* and *in vivo;* encouraging results from his therapeutic trial are reported. Since at the present time, there is no effective treatment for sickle cell disease, an attempt was made to duplicate Hilkowitz's experiments.

Case Report

A thirty-three-year-old colored housewife was admitted to Newport Hospital on August 18, 1957, complaining of abdominal pain, headache, dizziness and weakness of two days' duration. A review of her past history revealed that the patient had suffered, since childhood, frequent episodes of pain in the abdomen, arms and legs. Ten years ago a diagnosis of sickle cell anemia was made in this hospital. The patient's spleen was moderately enlarged at that time. Examination of blood revealed a hemoglobin of 6.2 gms % and the sickling phenomenon was positive. Since then the patient has been admitted to the Newport Hospital on ten occasions, for treatment of sickle cell anemia, associated with weakness, dyspnea and episodes of acute pain during crises. Treatment consisted essentially of blood transfusion, and extensive clinical studies were performed during this period. Diagnosis was confirmed by electrophoresis, revealing a pattern characteristic of hemoglobin "S." In 1956, the patient's liver was found to be enlarged and there was marked jaundice. X-ray studies showed multiple opaque gallstones. A laparotomy was performed, and the patient's spleen weighing 15 Gm. was removed and her gallbladder drained. Liver biopsy revealed a chronic cholangitis. After a stormy postoperative period the patient's condition stabilized. Her hemoglobin values fluctuated between 5 and 6 Gms. % and she was able to do all her own housework. The family history was not contributory.

Physical Examination: The present admission revealed a thin, acutely ill patient. Temperature 102.5 F, pulse 84, respirations 18 per minute. Blood pressure 120/80. The patient's sclerae were jaundiced; her eye-grounds were pale, with multiple hemorrhages. Examination of the chest revealed a markedly enlarged heart. The apex beat was found in the 6th interspace in the midclavicular line. The heart rhythm was regular, and a Grade II systolic murmur was noted in the mitral area; the 2d aortic sound was greater than the 2d pulmonic sound. Abdominal examination revealed a well-healed scar in the left hypochondrium. Palpation revealed a diffuse tenderness of the abdomen. The liver edge was one finger's-breadth above the umbilicus, firm and smooth to the palpating hand. The remainder of the physical examination was within normal limits.

Laboratory Studies: Hemoglobin 3.5 gms %, RBC 1.5 million cu. mm, hematocrit 10%. WBC 9,200 cu. mm, with neutrophiles 71%, lymphocytes 25.5%, eosinophiles 3.5%, reticulocytes 9.5%, normoblasts 40 per 100 WBC. Platelets 150,000 per cu. mm. The sedimentation rate was 3 mm. in one hour. A sickle cell preparation showed 100% sickling. There was marked anisocytosis and poikilocytosis of red blood cells, with a moderate polychromasia. Total serum protein was 6.0 gm% albumen 2.6 gms and globulin 3.4 gm%. Bilirubin direct 2.6 mg. and total bilirubin 3.0 mg.% Ceph. Flocc: 2+, alkaline phosphatase 7.9 Bodansky units. Urinalysis: Ph. 6.0, specific gravity 1.005, albumen, slight trace, sugar 0.5 and 1+, WBC. 3-5 and RBC 1-2 per high power field. The patient was

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treated with bedrest and analgesics. Her condition improved rapidly. Two days after admission her temperature was normal and the abdominal pain had subsided. Her blood count was essentially unchanged at this time. Hemoglobin 3.5 gms. %, RBC. 1.5 million per cu. mm., hematocrit 11%. The bilirubin had decreased to 1.8 mg. direct and 2.2 mg.% total. CO_2 C.P. was 15.2 Meq/L. At this stage an in vitro experiment with Acetazoleamide on the patient's blood was performed. Methods used by Hilkowitz and described in detail in his report were followed closely.

On August 27th, the patient's clinical and hematological states were stabilized. Her hemoglobin was 3.5 gms %, RBC 2.1 million cu. mm, hematocrit 10%, WBC. 6.8 thousand cu. mm., neutrophiles 62%, lymphocytes 34%, and eosinophiles 4%. There were 40 normoblasts per 100 WBC at this time. In spite of the disappointing in vitro experiments, clinical trial with Acetazoleamide was started on August 29th. The patient was given 7 mgs. Acetazoleamide per kilogram of body weight daily, divided into equal doses. Electrolyte studies were performed on August 29, 1957, before Acetazoleamide was given. Serum sodium was 157 Meq/L, potassium 4.7 Meq/L, chlorides 106, CO_2 C.P. 15.2 Meq/L. On August 30, the 2nd day of treatment with Acetazoleamide, the patient complained of dizziness, weakness and headache. She had received a total of 750 mgs. of Acetazoleamide at this time; her jaundice became more severe and serum bilirubin values increased to 2.0 direct and 3.5 mgs. %.

The patient's condition was definitely much worse; there was 100% sickling of red blood cells in a sickle cell preparation. Considering the negative in vitro results, and deterioration of the patient's clinical condition, Acetazoleamide was discontinued. Although the patient improved rapidly within twenty-four hours after Acetazoleamide was omitted, she was given a blood transfusion of 500 cc. on August 31, 1957. She was discharged home a few days later with hemoglobin 5.6 gms. and RBC 2.8 million per cu. mm. Her WBC and differential count were within normal limits. There were still 12 normoblasts per 100 WBC.

Comment

Increased sickling tendency was observed *in vitro* experiment when Acetazoleamide was added to the patient's blood. The clinical trial was totally unsuccessful because the patient developed signs of increasing hemolysis. Acetazoleamide did not reduce the sickling tendency. The patient's clinical condition changed radically for the worse during treatment with Acetazoleamide and improved when the drug was discontinued. These observations are in complete disagreement with those made by Hilkowitz. The explanation of this fact is not clear. Hilkowitz's patient was an eight-month-old baby. Our patient was a middle-aged woman with a sickle cell disease of long duration, who showed marked liver involvement and a much more advanced anemia, as judged by hemoglobin levels; whether her previous splenectomy had any effect on her intolerance to Acetazoleamide is questionable.

Although Hilkowitz presents quite convincing theoretical reasons for the efficacy of Acetazoleamide in sickle cell disease, and postulates that carbonic anhydrase inhibition and metabolic acidosis with reduced serum CO_2 tension is beneficial, Kass and Greenberg have recommended an opposite approach, and showed that the acidosis actually increases sickling tendencies. Sodium bicarbonate intravenously, in large doses, has been used for the treatment of sickle cell crises, associated with pain, and has been associated with prompt clinical remission. At the present time, this problem is unsolved. Further clinical and laboratory research is clearly indicated. Our experience with Acetazoleamide in sickle cell disease has been most discouraging.

SUMMARY

A case of sickle cell anemia is described, in which there was marked liver involvement, and severe anemia.

Acetazoleamide, when added to the patient's blood *in vitro,* produced an increased sickling tendency.

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EXPERIMENT No. 1

Percentage of Sickled cells in various preparations of the patient's blood

Preparation	*Percentage of sickled cells*
Patient's whole blood	30%
Washed cells	10%
Blood with normal saline	5%
Patient's whole blood with Acetazoleamide	100%

EXPERIMENT No. 2

This test designed to observe the effect upon sickling of Acetazoleamide, without using normal saline either as a control or as a solvent, gave the following results: 100% sickling of the cells in the preparation containing Acetazoleamide.

These tests were performed on two occasions. One with the use of oral tablets of Acetazoleamide, and on the second occasion with the sodium Acetazoleamide preparation (powder) with similar results.

EXPERIENCE WITH ASIAN INFLUENZA AMONG NAVY PERSONNEL*

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ONE OF THE FIRST personal experiences we had with the introduction of influenza to Newport was that of running to the Library to look up the history of previous epidemics. The first recorded influenza epidemic was in 1580, and since then, history has recorded the characteristics of repeated outbreaks up to the present time. The first reported epidemic in this country occurred in 1758. Asia and Europe were struck again with an influenza outbreak in 1782. In the nineteenth and twentieth centuries, recurrences were highlighted by the pandemics of 1890 and 1918

All of these outbreaks were characterized by rapid spread of the infection, high morbidity and low mortality, until the international catastrophe of 1918, which caused approximately 850,000 deaths in the United States alone, this figure including some 5,000 deaths among Naval personnel.

Another unique feature of the 1918 tragedy was its cyclic pattern; a relatively mild phase occurring in the spring, an explosive outbreak with high mortality in the fall, and a third phase of recrudescence early in 1919.

Another characteristic of the 1918 pandemic, was the high mortality rate in young adults. Ordinarily, influenza mortality rates are highest in children under one year of age, and in persons sixty-five years of age or older.

Throughout the years, we have roughly divided influenza viruses into three specific families, *A, B,* and *C*. Within the A-family, there are further defined some four, serologically intersecting groups of *Type A* strains, referred to as "sets." Each "set" has caused *Type A* influenza for a period of years. Strains of the so-called "swine set" probably caused the pandemic of 1918; this "set" remained in circulation for the following five- to ten-year period, and then vanished from man, to appear now only in swine.

From 1933-1943, six distinct influenza epidemics occurred in this country. By 1947, the so-called A-prime viruses completely replaced the earlier sets, and during the past ten years have caused sporadic outbreaks of influenza on a world-wide basis. The Asian influenza or Far East virus, identified in this country last spring, belongs to the A-family and is the first new addition in several years, being antigenically specific from other A-groups, although similar in some respects.

Since 1936, the B-family of influenza viruses has caused a succession of outbreaks, which recur at longer cycles than influenza A.

It is of interest to note that in both 1936 and 1940, influenza B outbreaks occurred early in the year, while influenza A infections occurred in the later months of the same years.

This history suggests a viral capacity which has a bacterial counterpart in antibiotic spheres; namely, some process of mutation which enables the virus to re-infect man, when some degree of immunity has been acquired.

Throughout the cycles of influenza, many attempts have been made to incriminate some specific bacterial organism that may accompany viral disease, contributing heavily to complications; but to date, no bacterial organism has been found to play this role.

The present Asian influenza epidemic was first reported in Hong Kong and Singapore in late April of 1957; from there it spread to Communist China, the Philippines, The Malay States, Japan, and India. Pharyngeal washings were collected early in this Far East outbreak by Army medical teams, who recognized the virus as unusual and shipped cultures to the states for further analyses.

This study revealed the virus to lie within the broad classification of the A-family; but its hemo-agglutination inhibition responses were not entirely similar to any of the previously defined *Type A* strains. Furthermore, no protective antibody against the Far East virus could be demonstrated in serum drawn from those repeatedly vaccinated with previously prevalent *Type A* viruses.

This represented, therefore, an unparalleled situation where a new influenza strain was isolated and recognized, before any actual cases occurred in this country.

On June 2, 1957, an explosive outbreak of in-

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*Presented at a meeting of the Providence Medical Association, October 7, 1957, at Providence, Rhode Island.

fluenza occurred aboard the *USS Barry,* which was berthed in Newport, Rhode Island. As far as can be discovered, this ship and its crew had not been out of the country or recently in contact with persons or places involved in the Far East epidemic. The first known cases of Asian influenza in this country occurred on that ship. Pharyngeal washings taken from several of those patients, showed the Far East virus.

During the ensuing six-weeks' period, we were called upon to treat a group of approximately 80 patients, representing the "suspected" group of complicated cases, with secondary bacterial infections. Many of the group, however, ran a benign course while hospitalized, and did not represent complicated cases.

Following the Newport outbreak, further cases appeared on the west coast, moved inland to Iowa and along the Atlantic seaboard, involving civilian populations, as well as military.

Many outbreaks were traced from youth conventions and meetings of youngsters who became ill en route or after returning home, whereupon members of the communities involved came down with the same viral disease.

The symptoms of influenza, as we all know resemble those of any of the common respiratory infections. In fact, the detection of a so-called epidemic in a given community, depends primarily upon this rapid and sudden involvement of a large percentage of the community. Viral studies on several representative cases will then define the responsible virus.

The usual story is one of a sudden onset of fever to 103-104 degrees, with severe prostration, headache (often bifrontal), burning of the throat and anterior chest, conjunctivitis, dry cough and myalgia of the lower back, thighs and upper legs. There may be nausea, vomiting and other nonspecific symptoms.

The physical examination usually reveals fever, conjunctivitis and pharyngitis; there may be wheezes in the chest, suggestive of bronchitis.

The laboratory work is generally unrevealing, although leukopenia and relative lymphocytosis are common. The chest film may be normal, or there may be increased markings.

The course of the fever is three to five days in uncomplicated cases.

The usual complications are bronchitis or pneumonitis, with subsequent clearing in ten to fourteen days.

As far as the complications are concerned, I must say that Doctor Feltman and his group handled most of them, so that the primary problem was one of bronchitis, with occasional strep and staphylococcus pneumonias. There were no specific organisms that could be incriminated, for just about any bacteria, commonly seen in respiratory infections, were found in this group.

As far as treatment was concerned, it was our initial feeling that, barring complicated cases, bed rest with supportive therapy at home, was ideal, in order to eliminate the hospital and its antibiotic-resistant bacteria. Symptomatic treatment proved as successful as anything we tried, including terramycin and penicillin. With the exception of the large-particle viruses, like trachoma and psittacosis, we all know that viruses are resistant to antibiotics, and side-effects become the only effects. The competition between normal bacterial flora and viruses may be valuable in overcoming viral infections. The administration of antibiotics may destroy opportunities for adequate culturing and identification of secondary bacterial invaders. And further, prescribing antibiotics, may indeed, actually prepare a patient for complications with one of the antibiotic-resistant organisms. The deaths from influenza that have been reported in other parts of the country are thought largely attributable to the complications with resistant strains of staphylococcus aureus.

Leon Feltman, MC, USNR

My discussion concerns an epidemic of Asian influenza, which occurred aboard the *USS Rooks,* while operating in the Red Sea.

On July 17 and 18, the ship was in the port of Massaua, Eritrea, for refueling. It had been reported to us by harbor authorities, that there were a few cases of flu in this port; in Asmara, some seventy miles north, several hundred cases were reported.

Two men from the ship were detailed to pick up our mail in Asmara, and they subsequently developed the disease on July 20, with an incubation period of three days. In addition, on the day of admission, they had profuse urethral discharge, dysuria and positive smears for G.C.

The other two of our first four admissions, presenting on July 20, had social contacts with the Massauans. So much for the mode of onset.

From July 20 through August 16, our daily case load was from one to nineteen cases. The total of the ship's personnel was 262, the total number of cases was 117, with an attack rate of 44.7 per cent.

The disease, as we saw it, was characterized by fever of 100 to 105 degrees, headache, sore throat, cough, diffuse muscle aches and pains, weakness and malaise. A few patients complained of low back and chest pains. One hundred per cent of the cases had fever, generalized muscle aches and pains, and severe headaches. These were the three most common complaints. Also, there were profuse diaphoresis, mild pharyngitis, shaking chills, sore throats and chest pains.

The physical findings, aside from those I have

mentioned, were not remarkable. Auscultation of the chest revealed very little, and the most that could be heard were a few coarse rhonchi; there were no rales, wheezes or other signs of a pneumonic process in any of the cases. Five of the patients, however, had persistent dry, but nonproductive cough for a week following discharge; for the most part, this was the only complicating factor encountered.

The duration of the illness was from three to nine days. All of the new patients were isolated and remained so until forty-eight hours of normal temperatures were recorded. The temperatures were taken q.i.d.

The spread of the disease to all enlisted compartments and division enlisted personnel was with equal distribution. Of the first cases, every other one was given a full course of terramycin 250 mg. q.i.d. for five days. The total sick days, in both categories, were approximately the same; we concluded that terramycin wasn't doing anything for our patients, and we stopped using it. Most of the cases went well into the 102 and 103 degree range.

In approximately 87 per cent of the cases, the fever lasted one to three days.

The treatment of all of our patients was symptomatic, with bed rest, forced fluids and aspirin. Throat washings and serum were collected from twenty of our acutely ill patients, and convalescence serum also was collected. I regret to say that I haven't the results of these tests.

In conclusion, the above described disease appears to have been epidemic influenza of the Asian type. It mimics other respiratory diseases. The disease is of moderate severity and duration. Most patients recovered in from three to five days. The ship remained operational, and the only complication was a bronchitis, which was of a mild type.

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A therapeutic trial had to be stopped because of the untoward effects. The results of our observations, both *in vitro* and *in vivo*, were the opposite of those observed by Hilkowitz, and suggest that the use of Acetazoleamide, in sickle cell disease, is not universally applicable.

References

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[2]Mortimer S. Greenberg and Edward H. Kass: Alkali in the treatment of painful crises in patients with sickle cell anemia. Preliminary report received from the American Cyanamid Company, August 1957.

SCLERODERMA*

Associated with Neurological and Psychogenic Symptoms — With Four Case Reports

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HIPPOCRATES DESCRIBED an Athenian who had a hard, indurated skin all over his body, and Galen spoke of patients whose skin was hard and leathery, with all the pores stopped up. Thirial, in 1845, gave the earliest good descriptions of scleroderma, and the French school, with Ball, Charcot, and Hallopeau, fashioned the present-day descriptions of this disorder. Grasset and Brissaud, in 1890, were among the early advocates that scleroderma was a vegetative nervous system disorder, while Strümpell first correlated some of the endocrinous cases, having observed a patient with scleroderma and acromegaly.

Its description, occurrence, and differential diagnosis, its numerous forms and variations are found in dermatological literature. The neurological interest is focused upon the determination of the level of the nervous system involved, for the pathology is extremely variable. Peripheral nerve lesions (trapezius palsy) have been known to be followed by localized scleroderma. Spinal cord injury, involving Jacobsohn's sympathetic nuclei, occasions other cases. Numerous cases are associated with other spinal lesions, as syringomyelia, poliomyelitis, and multiple sclerosis.

As a polyglandular endocrinopathic syndrome, scleroderma has shown a many-sided character. Cases occur with associated hypophysis, adrenal, thyroid, and mesenteric glandular disease. The thyroid seems numerically to outnumber the others in the cases reported.

No psychogenic cases have as yet been analyzed, but inasmuch as many hyperactive thyroids are psychogenic, at least in their initial stages, it is a reasonable hypothesis that psychogenic factors may form a part of the scleroderma pathology.[1]

The etiology of scleroderma is as yet not fully known. Thickening of the musculature of the peripheral arterioles and hypertonus of the peripheral vessels have been reported repeatedly. Since scleroderma is frequently associated with Raynaud's disease and other peripheral vascular disorders, evaluation of the clinical syndrome and the results of diagnostic tests, must be made in the light of this fact. Both peripheral and central autonomic nerve lesions have been reported, particularly in cases in which scleroderma is associated with Raynaud's disease (Sunder-Plassmann and Jaeger, 1940). Hoff (1941) reported a case of scleroderma associated with diabetes, caused by a tumor in the hypothalamic region, in which both disease processes subsided following surgical removal of the tumor. In another case reported by Hoff, administration of ergotamine, over a period of two years, resulted in typical scleroderma which cleared up after the medication was discontinued. Other evidence that autonomic dysfunction is a factor in the etiology of scleroderma is available. For example, the fluctuations in the flow of blood in the skin, corresponding to fluctuations in the external temperature, and the spontaneous improvement in the condition of the skin frequently observed following febrile reactions, afford confirmatory evidence of exaggerated vasomotor tonus. Other factors related to endocrine dysfunction undoubtedly are present in most cases, and may play a major role. Therefore, the general application of sympathectomy in the treatment of this disease is unwarranted.[2]

Disturbances in the Nervous System: Scleroderma has been considered by many as a neurotrophic disease. The following observations have been offered to support such contentions:

a. In most cases there is symmetry of the lesions.

b. There is evidence of vasomotor instability: Raynaud's syndrome is a frequent associated finding.

The onset is frequently at the menopause, a period when vasomotor changes are marked.

There is evidence of vasomotor or sympathetic nervous system disturbances producing visceral dysfunction in many of these patients.

c. There have been reports of beneficial results following the interruption of the sympathetic path-

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ways by:

Sympathectomy.

Acetyl beta methylcholine chloride.

d. There have been reports of scleroderma associated with:

Facial hemiatrophy.

Complete hemiatrophy.

Cerebral lesions.

Changes in the spinal fluid and histologic changes in the central nervous system.

e. The presence of electroencephalographic abnormalities.[3]

Scleroderma is frequently misdiagnosed as arthritis, but it is a disease of the elastic tissues which fragment or become disorderly or even absent. The arterioles in the area are obliterated by connective tissue proliferation. This causes an atrophy of the epidermis. The G.I. tract, from the lips to the anus, may be involved. In the bowel, the muscles may be replaced by fibrous tissue. The cardiac muscle may be replaced by this growth of fibrous tissue, and myocardial failure may result. There has been noted some atrophy of the uterus, prostate and thyroid. The kidneys may show fibrous infiltration. Calcium salts are quite prominent in the skin and subcutaneous tissues. This condition is more common in females than in males, and may begin at any time in life, but usually around the menopause. It has been thought that some allergic factor causes the profuse calcinosis, thus leading some to believe that it may be a dietary deficiency. It has been considered to be a general systemic disease of the connective tissues, of unknown etiology, and with a remarkable tendency to deposit calcium salts in the tissues affected.

The four cases which I have to report were of interest to me, as they were seen during the past year. I must confess that the diagnosis in these patients was not made on their initial or even subsequent visits to the office, but over a period of time.

Case I

The *first case* especially interested me, as she was referred by a physician in Pawtucket for dysphagia. Mrs. I. W., aged 76, was first seen in October, 1956, at which time she gave a history of having been in Roger Williams Hospital in May, 1956, for a period of two weeks, with what she described as a viral infection. The month preceding this, her husband had an emergency prostatectomy. Since her illness in May, she stated that she had not been well, and had been losing weight. She weighed 130 pounds during the previous year; when she was first seen in my office, her weight was 105 pounds. Her appetite was poor, she was unable to chew her food, she had difficulty in swallowing and also in keeping the saliva in her mouth, as it would run out the corners of her mouth. She complained that her skin was "frozen stiff," as she put it, and that her tongue was very sore all the time and was quite red. She had a marked weakness which bothered her considerably, as she was unable to do her work, and the muscles of her neck were so weak that in lifting her head off the pillow she had to use her hands to do so. She slept well, in spite of these handicaps. She complained of some looseness of bowels.

There had been no previous illness of this nature. She had a hysterectomy some fourteen years ago. She had twin sons, both of whom are married and well.

On examination this woman looked very sick. She was pale, her skin was very thick, hard, dry and like parchment; her face was drawn, her mouth very prominent and her tongue red. She showed marked evidence of weight loss. Pupils were equal and reacted to light only slightly. Eye movements and the eye-grounds were normal. She had a marked weakness of the neck and could not elevate her shoulders. She also had a marked weakness of the muscles of mastication and her speech was very weak. She had a diminished to absent gag reflex. Her heart was of fairly good quality. Blood pressure was 140/80. Chest was clear. Breasts were emaciated and no masses were noted. The abdomen was negative for masses. Liver was not palpable. There was an old abdominal scar in the mid-line of the lower abdomen. All her reflexes were found to be present and equal and none was found to be pathological.

A lumbar puncture was done on the day she was first seen and the initial pressure was found to be only 80 mm., the fluid was clear and the dynamics were normal. The cell count was three white blood cells with a total protein of 41 mgs. and a colloidal gold curve of 12221 10000. The spinal fluid Wassermann was negative.

At this time, I felt that this represented a vascular accident producing a bulbar palsy. She was put on Vitamin B and Redisol with vitamin B_{12} injections and Nicotinic Acid 100 mgs., three times a day.

On subsequent visits, she complained of burning sensations about the face, but she began to show some evidence of improvement with this program, and the vitamin B_{12} was given intramuscularly three times a week, by a visiting nurse, at the patient's home.

In December she reported that she could move her head better, but that she was "shrinking" and her joints were very stiff, but her appetite had improved considerably and she said that she was eating like a horse but could not gain any weight. Her speech was noticeably stronger but she was still drooling and her mouth was sore. There was no sensory disturbance noted at this time, in particular,

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the vibratory sense and position sense were present and about equal.

At this time, Cytomel was added three times a day. Her skin began to show some evidence of improvement and her weight began to rise, rather slowly. Blood count showed 3,430,000 red blood cells and 80% hemoglobin.

One year after her initial visit to my office she weighs only 93½ pounds. She still has to use her handkerchief for her salivation, her hands are sore, her tongue is not as bad nor as sore, she is eating well but is not gaining weight, her skin is much softer and not as pigmented, her gag reflex has improved, she can elevate her shoulders and does not have to lift her head from the pillow with her hands. Her reflexes are still present and equal and none is found to be pathological.

I feel that this patient represents a case of scleroderma, with associated neurological signs and cranial nerve involvement.

Case II

The *second case* is a female, Mrs. E. T., aged 62. On her first visit to my office in October, one year ago, she complained of a burning sensation on the right side of her face. On questioning her, I found that she had had a viral infection which lasted six weeks, in July 1956, prior to a mole being removed. The mole, at the hairline, had been getting larger. Just before this, she noticed a pulling sensation in the right side of her face and about the right eye and nose; her mouth became sore as well as the tongue, but only on the right side. There was some numbness of the cheek and chin. She noticed some itching, but not a severe pain at first, but a throbbing-like pain between the right ear and nose. She noted that her eye had become bloodshot and sore. She never had any previous trouble of this nature and there were no serious illnesses in the past. The appendix and an ovary had been removed some thirty-five years ago. She had migraine, off and on, for years. She is married and has three children.

Examination revealed a well-nourished, well-developed woman who appeared about her given age. She was pleasant and cooperative. There was some tenseness of the skin of her face and numbness to pin-prick over the 5th cranial nerve, maxillary and mandibular divisions. There was no facial weakness and no other cranial nerve pathology. Blood pressure was 140/80. Heart was of good quality and lungs were clear. There was some redness and soreness on the end of the tongue which didn't heal, and she complained somewhat of her false teeth. The rest of the neurological examination was normal.

At this time, I felt that the diagnosis was an atypical facial neuralgia. Vitamin B_{12} was given by injection and Vitamin B_1 was prescribed by mouth. She pointed out, at this time, that since she has had the pain in her face, she has had no migraine.

This patient continued to get worse and nothing has seemed to change the course of her illness. A lumbar puncture was refused. She began to complain of a pulling sensation at the corner of her right eye that annoyed her considerably. She was given tranquilizers without any real effect. She also noticed that exercising or too much work would make her face worse.

About the first of the year she noted that her hands were becoming stiff and sore and her face ache persisted. The skin was tight and a pulling sensation present. In April of this year, I noted that there was some swelling and induration of the right cheek and the diagnosis at this time was rather up in the air. She was gaining weight on the program, however, and she was still able to carry on her usual activities. At times, the pain would get so severe that Demerol was resorted to occasionally, and Percodan also was used.

Incidentally, brain waves were done, on the 4th of January, 1957, and the EEG was reported within normal limits by Doctor Maurice Silver. He reported some tension effect. X rays of the skull were done in November, 1956, with the following conclusions: "Except for the slight sclerosis of the right mastoid, perhaps related to old middle ear or mastoid infection, the findings were within normal limits. There was no definite evidence of increased intracranial pressure or calcified brain tumor. As stated above, special attention was paid to the petrous pyramids on both sides and these bony structures were not remarkable."

Wassermann test was negative, as was other laboratory work.

She was seen at the New England Center Hospital where a preliminary diagnosis was, "Possible Scleroderma," and they recommended cortical steroids. They also gave her chloroquin, which seems to be helpful in the collagen diseases. This, apparently, had no effect.

The patient has not improved at this time, in fact, she now shows considerable evidence of scleroderma which was not present during the first few months of treatment. Her hands are now stiff, tight and sore. Her face is not so sore nor does it show as much evidence of scleroderma as there is in her hands.

This case was presented because of its involvement of the fifth cranial nerve, stimulating a trifacial neuralgia or atypical facial neuralgia.

Case III

The *third case* is a forty-six-year-old woman who was first seen on September, 1956, at which time she gave a history of having made a mistake at her work. Instead of telling the truth about it, she stated that she had lied to her boss, or, at least,

she had not admitted that she had made the mistake. Since that time, this has become a severe obsession and delusion to her and is continually disturbing her so that she cannot eat or sleep nor can she sit still. She has lost weight and constantly talks about her mistake, and she also feels that she has gotten the doctor in trouble for signing her Sick Benefit slip which she did not deserve. She has been so disturbed about this whole situation that her husband has not been able to leave her alone to go to his work.

During the course of the physical examination, I noted a hard, thick, pigmented area over the right side of her face and on both arms. This, she stated, occurred following exposure to the sun while on the beach during the past summer. She minimized the importance of this although she made every effort to cover it up with creams and powder. She did not feel that it had any significance as far as her emotional symptoms were concerned. As her symptoms had reached delusional proportions she was admitted to the Fuller Memorial Sanitarium where sub-coma insulin was given to her and she subsequently made a speedy recovery, but gained very little insight into her problem. She was able to return home and did not discuss her problem any further.

About two months later, she took an overdose of medicine and was hospitalized in the Woonsocket Hospital. I have seen her on many occasions since that time and she is no longer depressed, the delusions have gone and the scleroderma is somewhat improved, especially on her face. The skin of her arms has softened and the pigmentation is lessening. Her whole appearance has greatly improved.

This case is presented only to point out that this patient had no physical symptoms of which she complained, but the psychological aspects of this case were of interest to me, and for which she was treated, and has subsequently made a complete recovery.

Case IV

The *fourth case* was recently seen in my office, having been referred by a physician in Providence. She is Mrs. E. N., aged 37, and was first seen on the 20th of September, at which time she stated that she had trouble with her right eye which seemed to be painful for the past two years, but her vision had been pronounced perfectly normal by an eye specialist. She also complained that the right side of her face would swell and become quite painful and this feeling was present most of the time. She was seen by another physician who stated that he thought it might be due to a lesion of the fifth cranial nerve and she was given vitamin B_1, to be taken by mouth each day. She was also taking 3 grs. thyroid a day for a "thyroid difficulty," as she put it. She has noted that these symptoms are worse just before her period and it has been associated with a numbness, and the center of the pain seems to be over the maxillary bone on the right. She has become very much concerned about her illness and is upset because her husband felt that it was all in her mind. He was not too sympathetic with her. She noticed that at times the pain would become quite severe and feel much like a headache and then the right eye would become bloodshot. She also complained that the skin felt tight and would pull, especially over the lower part of her mouth, and her dentures annoy her when she eats. There was no trigger area, nor is the pain like a typical trifacial neuralgia, but she is unable to do what she would like to do because the pain annoys her. She has lost her usual pep and interest in life.

Examination was entirely normal and, in particular, there was only slight evidence of thickening and tenseness of the skin of the face, on palpation. The blood pressure was 130/80. Neurological examination was entirely normal, as were the eyegrounds and cranial nerves. Sensation was intact.

I felt that atypical, right-sided facial pain, associated with the symptoms as presented in these other cases, was suggestive that this patient also was developing a scleroderma.

Treatment

Now for treatment. Many treatments have been suggested for this illness, but nothing has proved effective. Vitamins have been tried, along with many chemicals and vasodilators. Recently, cortisone has been used and, in adequate doses, cortisone is the only therapeutic agent available at the present time, which offers any hope to the patient with rapidly advancing disease. I have tried cortisone on one of the patients, without any real effect, but I intend to try it on patient No. 4. Patient No. 3 is doing well, and I did not feel it was indicated. As for patient No. 1, she, too, is getting along fairly well and I have not added cortisone, but intend to do so in the near future. It must not be overlooked, however, that proper nutrition and vitamins are important in maintaining the normal health of these individuals.

I recently found an article on a paper read at the 107th Annual Meeting of the A.M.A., in June, 1957, in the section of dermatology, on the effects of hormone Relaxin in scleroderma. The authors pointed out that they treated some twenty-three patients; fifteen women and eight men. They gave a saline solution of Relaxin, 20 mgs. twice a day for one to two weeks, and then substituted a gelatin preparation given intramuscularly daily, which amounted to 10 mgs. They noted that there was no improvement until the patient had received therapy for about three to five weeks. They reported that of the twenty-one patients, eighteen who had shown some degree of Raynaud's phe-

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QUOTABLE QUOTES

"Service benefits are a matter of very personal concern of the participating physician. He is relinquishing his right to evaluate his own services. He is entrusting the financial future of his practice to the decisions of the corporation in the arrangement of its fee schedule and its professional policies, and most important of all, he knows that having surrendered these important considerations, he will not regain them . . ."

DR. WILLIAM H. HORTON, *Executive Director,* Connecticut Medical Service, at a Blue Shield-Blue Cross executive training institute

* * *

"If you have an extra bed you are not using, and if you have a veteran, non-service connected, who needs hospitalization, and he cannot afford to pay for that hospitalization then we are automatically to take him in. But it is predicated entirely, you will note, on if we have extra beds. That is the whole essence of it.

"Now we find ourselves today in the situation of operating about 100,000 patients in our hospitals, and on any given day over a third of them are service connected and two thirds of them are non-service connected . . ."

"So, just putting it bluntly, that is the situation. If you add on any appreciable number of beds, either as a big addition or as a big hospital, you are building beds for non-service connected, whereas the law as it exists today actually says you will only take in non-service connected when you have extra beds, when they are beds that you do not need for service connected.

"So I think there is a fundamental question that has got to be answered here pretty soon: Is it the will of Congress and the American people that we will build beds for non-service connected?"

VETERANS ADMINISTRATOR HARVEY V. HIGBEE, at a hearing of the House Committee on Veterans' Affairs in February 1956

nomena, noted improvement; of eighteen patients with trophic ulcers, fourteen noted improvement and healing of the ulcers; sixteen noted some softening and loosening of the skin, particularly of the face and upper extremities, and withdrawal of the Relaxin caused the return, within three to ten days, to their previous state. I tried to secure some of this medication, only to find that it is extremely expensive, about $7.00 an injection. I have not yet decided to use it.

Discussion

William B. Cohen, M.D., of Providence, Rhode Island, Chief of Dermotology at Memorial Hospital, Pawtucket, Rhode Island.

I enjoyed Doctor Senseman's remarks very much concerning his very able description of Scleroderma. The two cases he presented were hurriedly examined but his approach to therapy was very helpful and good.

Scleroderma in its earliest stages can be quite difficult to diagnose properly because one must always bear in mind the possibility of a condition described as Scleroderma Adultorum. This condition is characterized by a hard, non-pitting edema involving the face, neck, thorax, abdomen, buttocks and legs. It almost never involves the hands and feet. It may involve the pharynx and larynx but skips the internal organs as such. This is in striking contrast to Scleroderma which is generalized and almost always involves the hands and feet.

The course of Scleroderma Adultorum is one of gradual regression after several weeks to several years. It can be distinguished from Scleroderma only by following the course of the disease and studying the distribution of the lesions.

CONCLUSIONS

Scleroderma is a disease of connective tissue, the cause of which is not known, and the symptoms vary according to the location of the lesion. It was also noted that there is an emotional factor in all these problems and in case Nos. 3 and 4 in particular. It is important to notice that some of the patients are much more severely involved than others. In the literature fatal cases have been reported. Others may live out their normal life span, others have complete remissions with occasional exacerbations. There is no specific therapy, but the cortisone and the vitamins, especially B_{12}, have been found helpful. These patients need close supervision and encouragement in their distressing disorder.

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THE FORAND BILL . . .

"THIS IS SOCIALIZED MEDICINE"*

DAVID B. ALLMAN, M.D., *President*
THE AMERICAN MEDICAL ASSOCIATION

IF I HAD one wish today, it would be that I could stimulate within every medical doctor in America the fire and devotion for personal and political freedom as expressed by our forefathers 181 years ago here in Philadelphia.

Like our early American patriots, other people around the world recently have demonstrated their zeal for freedom. Unfortunately, in East Berlin, Poland and Hungary the chants of the freedom-seekers have been silenced in tragic fashion. Nevertheless, the seed of freedom lives on, even under the tyrant's heel. Whether freedom grows again in those lands will depend upon how determined the people are to work for it, live for it and fight for it.

The lesson for us, from these modern European and early American freedom fighters is obvious: We cannot let this democracy — our vehicle of freedom — slip away from us; we must ever strive to preserve our progress and to push on to new heights.

I believe that freedom is a never-ending struggle, requiring the energy of each citizen no matter what his station in life. Our lives, our futures and our hopes are dependent upon the preservation of freedom. We have a duty to perpetuate it. If we fail in that duty, our republic will perish, bringing an end to a system of government that has brought more good to more people than has ever been known.

The Forand Bill Evils

There are many *so-called* easier ways, of course, of providing more good to more people than the free enterprise method, but they *initially* or *eventually* involve bigger and bigger government and *inevitably* lead to the exchange or forfeiture of our God-given rights.

The latest promise of a better life for more people comes to the American people in an attractive, but ill-directed expansion of Social Security benefits.

This proposed legislation, introduced by Rep. Forand (D.-R.I.) in the first session of the 85th Congress, would provide hospitalization and surgical benefits to all old age and survivors insurance beneficiaries. If passed, the federal government would withdraw Social Security taxes on a compulsory basis from almost the entire working population and use those taxes to reimburse hospitals and physicians for services rendered to all persons — some 12 to 13 million — eligible to receive old age and survivors benefits.

This *is* Socialized Medicine. This is Oscar Ewing's National Compulsory Health Insurance all over again. A decade later perhaps and for a limited number of people but it is "cut from the same cloth" and, I am sure, emanates from the same minds.

It *is* the beginning of the end of the private practice of medicine.

It *is* the death knell for the young, and growing voluntary health insurance industry.

It *is* a serious threat to the well-being and local autonomy of the voluntary hospital at the community level.

It *is* Socialism under the auspices of the federal government.

Gentlemen, I submit that this bill at least nine parts evil to one part sincerity!

For 35 years I practiced surgery, and never once did I operate without first making a full diagnosis of the case. Furthermore, none of you prescribes therapy without an adequate diagnosis. This is the way good medicine has been practiced.

Now along comes a new concept. A solution to a problem without first ascertaining its true scope. In short, prescribing treatment without a diagnosis about (1) the economic resources of our older population, (2) the present and planned programs of voluntary insurers, (3) indigent care at the state level, (4) the incidence of hospitalization and illness by age groups, and other complex research questions.

This procedure may be an advance in the field of vote-getting, but it would be a complete failure in medical and surgical practice.

Voluntary Method Far Superior

The physicians of America want to give only the best medical care to their patients, and I believe

continued on next page

*An address by David B. Allman, M.D., President of the American Medical Association, delivered at the opening session of the House of Delegates of the Association at the Clinical Session at Philadelphia, Pennsylvania, December 3, 1957.

that government medicine through OASDI will be detrimental to our people. We have the experiences of Socialized Medicine in other countries to support this belief.

For two decades the American people in great numbers have supported and benefited from voluntary health insurance. During that time the health insurance industry has had unprecedented growth.

The number of persons covered in every age bracket has been rising steadily. The type of plans and the quality of coverage have been improved enormously, and, I predict, they will continue to improve.

No one claims, of course, that the competitive voluntary health coverage system is perfect, but compared to government medicine it is far superior.

In the field of old-age coverage the health insurance industry is beginning to make rapid and far-reaching strides. Because of the great changes in medicine and in medical care the industry has embarked upon vast experimentation with many plans, different approaches, and coverage for various groups within the old-age population. The experiments are being tailored to fit the variety of needs.

Labor and management, too, are getting together in an attempt to provide health insurance coverage for retiring personnel.

Many of the plans devised will not at first be perfect. I am sure, however, that as a result of the many studies in the field of old-age coverage we will come up with an answer — perhaps many answers — to the compound issue.

I personally feel that we are on the verge of grand achievements in furthering the well-being of our older population. Medical science is leading the way, and the health insurance industry must proceed with alacrity with the best possible coverage programs on a non-cancellable basis.

I firmly believe that dynamic competition in the health insurance industry will bring sweeping changes and new ways to improve personal security for older people without the loss of personal freedom for these persons and all their fellow citizens.

No Monolithic Answer Possible

The issue of old-age health protection is complex; it embodies many problems. Consequently, it is not possible to solve the issue with a monolithic answer like the Forand bill.

I admit that the Forand proposal would relieve a large segment of our population — the older folks, their children, management, labor unions, physicians and others — of their responsibilities, but I do not believe that the surrendering of the principle of self-reliance and the experience of private know-how for the abuse of government dictation can solve the nation's problems.

In addition, you know as well as I do that special privileges for any class of citizens lead directly to demands by others for equal governmental treatment. Consequently, government will then make further inroads into our private lives.

Are we not seeing this happen in the field of federal disability insurance under the Social Security program with new proposals to lower the eligibility age?

We can be sure that passage of the Forand bill would soon generate new proposals to provide government health insurance protection for the entire population.

In an effort to acquaint and alert our profession, the hospitals, allied fields and the public to the dangers of the Forand bill, your American Medical Association has begun to circulate information calling for individual and group action against this proposed legislation.

Three weeks ago I sent out a letter and a Forand bill fact-sheet to the medical chiefs of staff of all hospitals, with copies to the hospital administrators.

My plea today is for you to embark upon a local action-campaign to enlist the full support of your community against this legislation.

As in our fight against national compulsory health insurance, the stakes are high for the American people, for the medical profession, for the hospitals, and for all allied health groups. We dare not lose.

We must, however, keep in mind that in our struggle to preserve the private practice of medicine, we are fighting for the basic freedoms which have enabled democracy to thrive and our nation to prosper.

In this campaign to preserve the freedom of medical practice, we will be criticized for being negative and accused by our opponents of being reactionary. This is to be expected. It is the accepted technique used to discredit those who would oppose Socialism.

It is fitting that our declaration of medical freedom be made here in Philadelphia — where 183 years ago the first Continental Congress assembled to protest against the loss of colonial rights and privileges. Where the Declaration of Independence was signed two years later. Where the Liberty Bell and Constitution Hall remind us that "Eternal Vigilance is the Price of Freedom."

Perhaps it is also fitting to remind you that the patriots of 1776 were not without their critics. But their love of liberty and quest for freedom was not to be deterred. May we in the medical profession supply the leadership necessary to preserve freedom with the same determination.

Principle, Not Expediency

At the last meeting of this House of Delegates

you directed the Board of Trustees to conduct an educational campaign to acquaint the membership with the Association's reasons for opposing the compulsory inclusion of physicians under the Old Age, Survivors, and Disability Insurance program of the Social Security System. This has been done. Three articles appeared in the Journal and an individual mailing was made to the profession. This mailing was a pamphlet titled *Which Way?*

Only a relatively few replies were received as a result of this mailing and in response to my *President's Page* on this same subject. Of those who did reply, however, many objected to the Association's position.

A number of the letters criticized the American Medical Association for its unwillingness to conduct a poll of its members on this issue. You will recall that a resolution to this effect was rejected by your reference committee in June.

Perhaps some explanation is in order, at this time, which will demonstrate the logic behind this action.

We must not forget that the American Medical Association is a federation. And as such its policies are established by the elected delegates representing the state associations comprising this federation.

To draw a parallel — the United States is also a federation and as such is governed by the elected representatives from each state. In the American Medical Association House of Delegates as in the United States Congress policy or legislative action is not determined by popular vote.

This procedure, rather than decision by popular vote, has been followed by our government and our Association because it permits a more considered opinion to prevail in formulating policy.

Singleness of Purpose Needed

If we are to stand fast against those who would promote an unhealthy climate for private effort and ingenuity, we physicians must have a singleness of purpose within our ranks. We must present a united front, ready to rally to the cause of the best possible medicine for all Americans.

It is not enough, either, that only the older hands in the local and state medical societies take the time and exert their efforts to curb the evils of outside encroachment and control of medical practice. We need the young members of our profession as medical leaders in the socio-economic field. They can provide much of the new imagination, vigor and positive programs so urgently required to defend the sound principles of the founding fathers of our nation and of our medical association.

We all know there is work to be done if our precious freedoms are to be preserved. Just as our profession is turning more and more to the prevention of disease, so must we apply our talents to the preservation of our nation's socio-economic health and to the prevention of political diseases that can cripple, waste away and kill our freedom.

The work we have to do, gentlemen, is truly an emergency. It cannot be put off; it cannot be accomplished by a few hands over night. It demands that all men of high principle work in harmony, in strength and with all good speed.

Back in 1949-50 we moved in this manner to meet an ill-advised, but heavily supported government threat. Our efforts then made it possible for us to be a free profession undominated by government.

Now we are called upon again to stem a new and equally serious peril.

How effective we are in our unified efforts to deter the trend toward intervention into medicine may well determine whether we are to remain an unhampered profession dedicated to giving patients what they want most — good, individual, personalized medical care.

In rallying Americans for liberty in 1775, the great patriot Thomas Paine wrote a stanza in his poem, *The Liberty Tree,* in PENNSYLVANIA MAGAZINE. It is appropriate now as the medical profession stands here in the cradle of liberty and speaks for freedom:

"From the east to the west blow the trumpet to arms!
Through the land let the sound of it flee;
Let the far and the near all unite with a cheer,
In defense of our Liberty Tree."

DOCTOR DAMESHEK TO LECTURE

On January 15, Doctor William Dameshek, Director of the Blood program of the Research Laboratory at the New England Medical Center, will lecture at the Roger Williams Hospital on *Hemolytic Anemia.* The lecture is scheduled from noon until one P.M.

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PRESENT STATUS OF CHEMOTHERAPY IN TUBERCULOSIS

THE COMMITTEE on Chemotherapy and Antibiotics of the American College of Chest Physicians has recently published a progress report on this subject. The development of new drugs and the constant restudy of the effects of older ones necessitate repeated reviews to keep us reasonably up to date in this field.

While primary attention is directed to pulmonary tuberculosis, there are certain general principles that hold for the treatment of all tuberculosis. One can now approach a case of tuberculosis with optimism rather than the fatalistic attitude so prevalent before the advent of specific antituberculous drugs and a great many surgical procedures, formerly, can now be avoided by the use of antituberculous drugs. Further, many cases formerly beyond the help of surgery, can be beneficially operated on after preliminary medical therapy. In all cases, it is of paramount importance that the drug be used continuously and for a prolonged period. It is generally considered that a full year of chemotherapy is the minimum to aim for in any case of active tuberculosis. Every attempt should be made to determine that the drug chosen is one to which the organisms, in the particular case, are sensitive, and to check from time to time, to assure that this sensitivity is maintained. Ordinarily, the persistence of a favorable course is an adequate check. Another thing that must be kept constantly in mind is, that there is no effective antituberculous drug which is not potentially toxic or allergenic for any particular individual to some more than to others.

Whatever form tuberculosis takes, if active, it should be treated with antituberculous drugs, at least as an adjunct to other kinds of therapy; and whatever its form, it should be treated also with a reasonable amount of rest commensurate with the needs of the given case. The use of drugs cannot be considered as a means of circumventing the time-honored principles of rest and sanatorium care, although there is little doubt that our experience with the drugs has made it possible for us to modify our ideas as to the amount of rest desirable in most cases.

As for the specific drugs to be used, there are certain general considerations that should be reiterated. Perhaps the most important is, that a combination of at least two of the commonly accepted drugs should be used concurrently, wherever possible; and it is becoming ever more generally accepted that one of these drugs should be isoniazid, again whenever possible. While many new drugs have been developed in recent years,

there is still none to supersede the three standbys of several years — 1. Streptomycin (SM), 2. Aminosalicylic acid, formerly para-aminosalicylic acid (PAS), or a dokium, calcium or postassim salt thereof, and 3. Isoniazid (INH). There are certain circumstances, however, when these drugs must give way to others, either because of toxic or allergic reactions or because of the presence of strains of tubercle bacilli resistant to these drugs.

Some of these alternative drugs are extremely effective chemotherapeutically, but unfortunately they carry a considerably higher risk of toxic reactions, and therefore, may be used only when the three leading ones fail, for the reasons mentioned above, or for some other less understood reasons. At the present time, there are three effective secondary drugs with which there has been considerable experience and which are worthy of trial, under carefully controlled conditions, in hospitalized patients, namely: Pyrazinamide (PZA), Viomycin, and Cycloserine (CS). Pyrazinamide has proven to be a very effective antituberculous drug, but it carries a relatively high incidence of toxicity. With pyrazinamide severe toxic effects on the liver have been the chief restriction to its use. Viomycin has a tendency to produce renal and 8th nerve damage and is probably less effective therapeutically than PZA. Cycloserine also appears to be limited in effectiveness and is associated with a good deal of neurotoxicity. Although any combination of two of the primary drugs (SM, PAS, INH) will, ordinarily, be therapeutically effective, it has generally been considered advisable to avoid, if possible, using isoniazid and streptomycin together, for fear resistance to both drugs might develop; then neither of these two most satisfactory drugs would be effective for future need. It now appears, however, that this reasoning may be fallacious. The evidence of this is, that if resistance develops to a combination containing PAS, PAS may no longer be effective in preventing the development of resistance to another drug in that individual. Streptomycin and dihydrostreptomycin are so similar in their characteristics that they are therapeutically essentially one and the same drug. The only practical difference is in their toxicity. Streptomycin is more likely to cause vestibular damage, while dihydrostreptomycin is more likely to cause auditory damage.

In the average case of pulmonary tuberculosis, there is little to choose between streptomycin and isoniazid in regard to demonstrable therapeutic effectiveness. Both are effective in most cases. However, as more information is collected, it is apparent that isoniazid diffuses more readily into the tissues and body cavities. Therefore, a regimen containing this drug as one of the combination, is the choice in the more advanced necrotic lesions of the lung, and in most extrapulmonary tuberculosis. In miliary and meningeal tuberculosis, one would be considered negligent if isoniazid were not used as one of the drugs in the combined drug regimen. It is in these two conditions that isoniazid has most dramatically proven its value by converting fatal diseases into diseases amenable to treatment, in the great majority of cases diagnosed early; and it is generally considered that all three drugs should be used in them and in overwhelming tuberculosis of all kinds.

The use of corticosteroids and corticotropin is a matter for careful consideration in the individual case. It is certainly not to be advocated in the average uncomplicated case, but it has a place in conjunction with antituberculous drugs, in severely toxic individuals and in those with long-standing disease and evidence of adrenocortical hypofunction. In meningeal tuberculosis, it may have a beneficial effect on cerebrospinal fluid block.

The matter of dosage and toxicity of the various drugs, and the details of therapy of more specific nature, is beyond the scope of this editorial. It should be emphasized, however, that the drugs should be used in full dosage and continuously, for prolonged periods; that they should be used in combination whenever possible, and that when progress is unsatisfactory, careful attention should be paid to possible causes, especially the appearance of strains resistant to the drugs being used. Reviews of progress in tuberculo-therapy are continually being written and should be consulted for the details of therapy. A few of the more recent are:

1. *Present Status of Chemotherapy in Tuberculosis.* Report of Committee on Chemotherapy and Antibiotics of American College of Chest Physicians: Dis. of Chest 32:346-351, 9/57
2. *Chemotherapy of Tuberculosis,* Ferebee, S. H. and Mount, F. W. Public Health Reports 72:412-419, 5/57
3. *Chemotherapy of Tuberculosis.* Selikoff, I. J. Journal Mount Sinai Hosp. 23:401-445, 7-8/56
4. *Changing Concepts in the Treatment of Pulmonary Tuberculosis.* Irving Kass and Associates. Annals of Internal Medicine 47:744-761, 10/57

For more exhaustive and exhausting studies, one may consult the transactions of the conferences on the chemotherapy of tuberculosis published annually by the Veterans Administration-Armed Forces with the cooperation of the National Tuberculosis Association. The transactions of the Sixteenth Conference has been recently distributed.

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THE EDUCATIONAL COUNCIL FOR FOREIGN MEDICAL GRADUATES

The problem of accurate evaluation of the medical training of the large number of graduates of foreign medical schools who every year arrive in the United States is one which hitherto has appeared to be almost impossible of solution. The American Medical Association has not found it feasible to obtain any accurate knowledge of such a large proportion of the medical schools from which these physicians come, that it has deemed it wise to abandon the attempt to list those schools which can be "approved" as giving to their students a training that is the equivalent of that offered by the universities of the United States and Canada. Licensing authorities, hospitals and communities do, however, stand in need of some method of forming a judgment as to the basic training of the person who comes to this country armed with a diploma from a medical school, the work of which cannot be accurately assessed. It is essential that the American public be protected from exposure to the attentions of incompetent doctors, and at the same time it is also very important to see that able and well-trained physicians from abroad are given the opportunity to take their places in American hospitals and communities where they are really needed. Many of those who come as refugees, as, for example, recent escapees from Hungary, are highly skilled specialists with basic training fully comparable to that received in this country. A number of these are already making a valuable contribution to the work of our profession.

To meet the challenge posed by this state of affairs the Educational Council for Foreign Medical Graduates has been set up. This has been organized by the efforts of a Joint Committee formed from the Council on Medical Education and Hospitals of the American Medical Association, the Federation of State Medical Boards, the American Hospital Association and the Association of American Medical Colleges. A very able executive director has been appointed, and the first examinations will probably be held in February 1958.

It is the purpose of these examinations to evaluate each physician as an individual, without any attempt to assess the facilities of the medical school from which he holds his diploma. The examinations will be searching and detailed. They are being prepared with the aid of the leading authorities on examinations, including the National Board, and should serve as a very adequate screening of all immigrant doctors. It is to be hoped that the licensing bodies in the various states will accept the results of these tests, made, as they are, by an agency which their national federation has helped to establish. Those boards which formerly required that a foreign-trained candidate be a graduate of a medical school on the now abandoned A.M.A.-approved list will, it is believed, consider such a physician as acceptable if, instead, he has passed this examination.

If this action is taken by all, or most of the state boards, we will have a situation that will afford excellent protection to the public and a great help to those hospitals which are forced to recruit their house staffs from among medical graduates who have been trained outside the United States and Canada. In addition, it will allow a number of such physicians now in the United States, who have been considered ineligible for specialty board examinations by reason of their medical schools not having been included on the "approved list," to qualify for such examinations.

It is anticipated that the examinations of foreign-trained physicians now in the United States will be held early in 1958—probably in February—and that the examination of physicians still in their countries of origin will be held outside the United States at appropriate locations in or shortly after July 1958. By the time this has been published, notices of the first set of examinations will probably have been sent out. Thus, it appears that the solution of a very difficult and perplexing problem of primary importance will be solved.

THROUGH . . .  *the Microscope*

Doctors' Fees

A report in the MONTHLY LABOR REVIEW on medical care costs, in the cost of living index, notes that in the past twenty years hospital costs have risen sharply in contrast to physicians' fees. The article by a Bureau of Labor Statistics employee lists these increases between 1936 and 1956:

Hospital room rates	264.8%
Dentists' fees	82.1%
General Practitioners' fees	72.8%
Surgeons' fees	59.5%

In the same period, medical care costs generally have lagged behind costs of food, personal care other than medical and clothing. The report makes this observation: "With the higher level of living attained in 1950, relative expenditures for medical care tended to increase as incomes increased, as is usually true of items considered as 'necessities' in the family budget. The fact that this pattern has begun to appear in the spending of workers' families indicates the high order of importance they place on medical care. . . ."

What the Public Wants in Health Coverage

When the Michigan State Medical Society met in October, its members learned that most people in Michigan who subscribe to prepaid medical plans want more services, and are willing to pay for them. The findings for this statement came from a public opinion survey conducted the previous four months involving the views of more than 12,000 persons. Some of the findings:

"With 81% of the population of Michigan covered by some form of health insurance, the vast majority are satisfied with the situation.

"Of those covered, 64.6% have Blue Shield. Only 10% expressed unfavorable opinion of the service; 64% liked it, and 26% were noncommittal.

"The survey showed that Blue Shield subscribers believe they pay an average of $5.95 a month for medical and surgical coverage. The actual average is $2.83. The majority are willing to pay up to $6.95 a month in order to obtain additional benefits.

"The added benefit that most people would like to have is diagnostic service in hospitals. There is no overwhelming clamor for any single benefit, but many were mentioned.

"Many people said they would like to have Blue Shield pay for such things as X rays, emergency house calls, vaccinations, surgery in doctors' offices, and medical consultations.

"Questioned regarding deductible medical-surgical cost payment, the result was almost an even division for and against.

"The majority of those in favor of such partial coverage voted for $25 deductible per case rather than $50 or $100.

"The doctors' main complaint against Blue Shield is 'unfairness in the schedule of payments they received for their services.' They felt that fee schedules have not kept pace with the rising cost of living."

Doctor Draft Law Expires

Amendments to the Universal Military Training and Service Act, as amended, adopted in June 1957, replace the former "Doctor Draft Law" and provide for meeting the requirements of the Armed Forces for medical, dental and allied specialists until July 1, 1959. Under the new amendments *only those specialists who are otherwise liable* as regular registrants are subject to induction under the Selective Service law.

The old "Doctor Draft" law under which medical, dental and allied specialists had been liable since 1950, expired July 1, 1957. It had placed liability for service on older doctors, dentists, and allied specialists, at one time up to the age of 51.

One of the principal effects of the new amendments to the basic Selective Service law is to limit liability of doctors, dentists and allied specialists to age 35 for those deferred on or after June 19, 1951; and to age 26 for others. By placing medical, dental and allied specialists under the same provisions of law and regulations as other registrants with respect to the upper limit of the age of liability, the 1957 amendments relieve from liability under the Universal Military Training and Service

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Act, as amended, any such specialists over the age of 32 on the date the amendments became effective, July 1, 1957. This is true because in order to have acquired extended liability under the June 19, 1951 amendments, a registrant must not only have been deferred on or after that date, but also must not have attained the 26th anniversary of his birth by that date. Any man who was 26 on June 19, 1951, would on July 1, 1957, have been 32 years old.

Other interesting provisions are:

No person in the medical, dental and allied specialist categories shall be inducted if he applies for an appointment as a Reserve officer and is or has been rejected for such an appointment on the sole ground of physical disqualification.

The President may order to active duty for not more than 24 consecutive months any member of a Reserve component who is such a specialist, who is under 35, and who has not performed at least 1 year of active duty in the Armed Forces.

Qualified specialist aliens liable for induction shall not be held ineligible for appointment as commissioned officers solely on the grounds that such alien specialists are not citizens or have not declared their intention of becoming citizens.

Periods of active duty performed by specialists in student programs prior to receipt of appropriate professional degree or in intern training, shall not be counted toward establishing the qualification of such specialists for classification as a veteran exempt from liability for training and service.

Social Security Financial Study

A twelve-man advisory council has been named to review the financial position of the social security system and report back to Secretary Folsom. The council, provided for by the 1956 social security amendments, will review the status of the OASI trust fund and the new disability insurance trust fund in relation to the programs' long-term obligations. Scheduled payroll tax increases for 1965, 1970 and 1975 also will be studied. Mr. Folsom said the council could look into the cost of any new program (such as hospitalization at age 65), although studies of possible changes were not mentioned in outlining the group's duties.

Asked the position of the Department of Health, Education, and Welfare on the Forand bill for free hospitalization of the aged under social security, the secretary said there was no position, "but in a general way we are concerned with not getting payroll taxes to too high a level. Now payroll taxes are scheduled to reach 4¼% for both employer and employee and 6⅜% for the self-employed by 1975. Also, these taxes are on gross earnings, with no deductions (as for income taxes)."

Representing employers on the council will be Elliott V. Bell, editor of BUSINESS WEEK; Reinhard A. Hohaus of Metropolitan Life Insurance Co.; Robert A. Hornby, Pacific Lighting Corp. Employee representatives are Joseph William Childs, United Rubber, Cork, Linoleum & Plastics Workers; Nelson H. Cruikshank, AFL-CIO; and Eric Peterson, International Association of Machinists. Representing the public and the self-employed are J. Douglas Brown of Princeton; Arthur F. Burns, former head of President Eisenhower's council of economic advisers; Carl H. Fisher, University of Michigan; Thomas N. Hurd, Cornell; Robert McAllister Lloyd, Teachers Insurance and Annuity Association; and Malcolm H. Bryan, head of Atlanta Federal Reserve Bank.

New Tax Ruling

A new ruling by the Internal Revenue Service may mean that doctors practicing as an association are entitled to the same tax deferment privileges as corporation employees regarding annuities. In the now famous Kintner case, a federal court of appeals ruled that a group of doctors, formerly associated as partners, would be entitled to tax treatment as a corporation after they banded together in an association. Until now, however, the IRS has held that it would not follow the Kintner decision, but would consider a similar association as a partnership, and partners can't be employees under a pension plan. Now IRS is reversing itself; it will not deny the favored tax status to an association of doctors simply because indications are the association was formed to obtain pension plan benefits for members of the association.

If IRS maintains this policy, the effect will be to allow doctors forming an association (in line with IRS criteria yet to be established) to enjoy approximately the same annuity advantages they would under the Jenkins-Keogh and similar bills now pending in Congress. The sponsors would have to meet two tests: the association would have to qualify for the federal tax benefits, while at the same time avoiding the charge, under state law, of engaging in the corporate practice of medicine.

BCG Mass Vaccinations Opposed

After studying the advantages and disadvantages of BCG vaccine to control tuberculosis, a special Public Health Service Committee recommends against mass vaccination campaigns, proposing instead that vaccinations be limited to special situations where exposure to the disease is unusually high and where other means of control are inadequate. The committee concluded that vaccinations should be limited to:

1. Physicians and other medical personnel working in hospitals with inadequate tuberculosis control programs.

2. Families with whom a member infected with tuberculosis must reside.

3. Those associated with institutions in which exposure is known to be high, such as certain mental hospitals and prisons.

The committee gave weight to arguments that because persons vaccinated with BCG have a permanent positive reaction to testing, testing and case-finding surveys are made difficult. It also pointed out that vaccination campaigns would occupy the time of persons trained in TB control work, who, in the committee's opinion, could be more profitably employed in other directions

In releasing the report, BHS comments:

"BCG has been used in tuberculosis immunization for more than 30 years, and has had broad acceptance in certain European nations. There has been and still is wide variance of opinion as to its precise value, even in some of the countries that have been using BCG vaccine for many years. . . The committee points out that studies have shown the effectiveness of BCG ranges from 0 to 80%. Because of this wide range, the committee recommends against large-scale vaccination programs in this country."

Other recommendations and findings, some in conflict with those of the PHS committee, have appeared in the A.M.A. JOURNAL in the past few months: No. 9, pages 951 and 974; No. 13, page 1501; No. 10, page 1146, all Vol. 164.

Civil Service Pushes Health Plan

In an effort to disseminate information fully and gain widespread support among U. S. workers before next session of Congress, the Civil Service Commission is issuing a series of fact sheets explaining the commission-sponsored program of health insurance for federal civilian employees. The particular plan was the basis of a bill introduced last session but not acted upon. Other ideas were proposed in prior sessions, but there has been no action on any of them. Under the program now sponsored by CSC, the participating employee would have to take both basic and catastrophic insurance, with the U. S. paying a third of the cost. Basic insurance could be that provided by employees' unions or associations, fraternal groups or Blue Cross-Blue Shield, but it would have to meet some standards set by CSC.

The latest CSC fact sheet on insurance includes eight questions and answers, and three statistical tables, showing (a) variation of premium costs offered by federal employee unions and associations, city-by-city variation in Blue Cross-Blue Shield costs, and (c) costs under New York's HIP and the Group Health Association of Washington, D. C.

continued on next page

Philanthropy Still Exists in Rhode Island

Philanthropic foundations in Rhode Island have assets of more than $8,800,000 and have made grants of more than $935,000 in a single year, according to findings of a survey announced by American Foundations Information Service.

The survey, based on tax and other official records, foundation reports and questionnaires answered by foundation officials, revealed 55 foundations in the state, as compared to 37 found in a similar survey two years ago. Since the previous survey, total assets have increased by $2,450,000.

Among sponsors of recently formed foundations in the state are individuals, families and business firms, according to the survey. Several of the largest are trusts established by wills.

The increase in number and size of Rhode Island foundations is comparable to that being found in surveys now being conducted in other states, according to Raymond T. Rich, director of the service, established in 1952 as the national center of foundation information.

Taxes Will Go Up and Up . . . Social Security Says:

"The following table shows the present tax rates and the scheduled increases (on $4,200 wage base):

Calendar Year	*Employee*	*Employer*	*Self-Employed*
1956	2%	2%	3%
1957-59	2¼%	2¼%	3⅜%
1960-64	2¾%	2¾%	4⅛%
1965-69	3¼%	3¼%	4⅞%
1970-74	3¾%	3¾%	5⅝%
1975 and after	4¼%	4¼%	6⅜%

In other words: A recent announcement stated that the Social Security system is in trouble. Benefit funds are melting as applications pour in at a rate in excess of Federal estimates. HEW Secretary M. H. Folsom was quick to say that expenditures may exceed income in 1959, but higher taxes in 1960 will cover the deficit. Check the chart above for proof that our children will be paying the bills for our benefits.

Voluntary Health Insurance Gains

Benefit payments to Americans covered by voluntary health insurance through insurance company policies were 15% higher during the first nine months of 1957 than for the same period the year before, the Health Insurance Institute announced recently. Reports from the nation's insurance companies showed that from January 1 through September 30, 1957, an estimated 1.8 billion dollars had been paid to help pay hospital and doctor bills and to replace income lost because of accident or sickness.

Benefits paid under group health insurance policies covering hospital, surgical and medical care and loss of income totaled 1.3 billion dollars by the end of the third quarter, an increase of 20% over the same period for 1956, the Institute said, while the rise in benefits under individual and family type policies was over 469 million dollars, an increase of 4%.

Persons covered under hospital expense policies, which help pay for the costs of hospital care, received a total of 748 million dollars, with 578 million dollars received through group policies, and 170 million under individual insurance policies.

Surgical expense insurance, which helps reimburse the insured for operations, accounted for 299 million dollars in benefit payments, with 241 million dollars going to those protected under group policies, and 58 million dollars paid to individual policyholders.

Payments by insurance companies to persons covered by medical expense policies, which help pay for medical care and treatment other than surgery, amounted to $53 million dollars by September 30, the Institute survey showed. Of this total, 45 million dollars was paid out under group plans, and 8 million dollars through individual policies.

Major medical expense insurance, which helps defray the cost of serious, or catastrophic illness, paid holders of such policies a total of almost 85 million dollars in benefits, with group policyholders receiving some 81 million dollars, and holders of individual policies receiving over 3 million dollars. These figures, the Institute added, include policies written alone or to supplement the basic hospital, surgical and medical coverages.

Veterans Administration Hospital Admissions

Statistics on VA Hospital Operations during fiscal and calendar years 1956 have been made available as the result of recent appropriation hearings on VA budget requests. The following information will do much to bring interested physicians up to date.

It has been estimated that for fiscal year 1957, the service-connected load will decrease to 36.7% of the average daily patient load and in fiscal year 1958 to 36.6%. It was reported that in fiscal year 1955 38.0% of VA patients were being treated for service-connected disabilities.

VA PATIENTS — FISCAL YEAR 1956

Facility	*Admissions*	*Discharges*	*Average Daily Load*
Hospitals	485,508	483,351	110,205
Domiciliaries	38,113	38,548	17,047
Contract Hospitals	31,947	28,910	3,253
State homes	8,072	8,060	8,793

	Average Daily Load	*Service-Connected*	*Nonservice-Connected*
NP Hospitals	54,581	30,565 — 56%	24,016 — 44%
TB Hospitals	7,757	1,947 — 25.1%	5,810 — 74.9%
GM&S Hospitals	47,867	8,090 — 16.9%	39,777 — 83.1%
Total Hospitals	110,205	40,602 — 36.8%	69,603 — 63.2%

BOOK REVIEWS

GIFFORD'S TEXTBOOK OF OPHTHALMOLOGY by Francis Heed Adler, M.D. W. B. Saunders Co., Phil., 1957. Sixth edition. $8.00

This well-known and deservedly popular book is not just a condensation of a larger text written for the specialist; it has been prepared specifically for the undergraduate and general physician. For example, in the chapter on surgery most descriptions of surgical techniques have been deleted, the chapter being devoted mainly to a discussion of the indications for the various surgical procedures. The book covers the whole field of ophthalmology, including related general diseases and diseases of the nervous system; it confines itself, however, to the more common and important conditions and avoids clinical rarities.

In the present edition the subject of ocular injuries is treated in a separate chapter rather than under separate scattered headings. Also greater emphasis has been placed on virus and degenerative diseases in correspondence with the changing medical scene.

This beautifully printed and illustrated book serves its purpose admirably.

MILTON G. ROSS, M.D.

BATTLE FOR THE MIND by William Sargant, M.D. Doubleday & Company, Inc., Garden City, 1957. $4.50

A book written by an author one has been associated with whets one's interest. I had the pleasure of being associated with Dr. William Sargant at the Maudsley Hospital in London, England, in 1935. His capacity to think on his own rather than be stampeded by a fad was conspicuous. Pavlov's concept of "conditioned reflexes" could apply to my response to Dr. Sargant's thinking. There was delight in happening upon his articles in the *Atlantic Monthly* depicting the opinions of John Wesley (1703-1791) on his methods of effecting abreactions which resulted in religious conversions. These reappear in BATTLE FOR THE MIND. There is validity in some of these opinions for present-day psychiatrists interested in motivating change.

Dr. Sargant speaks of his book as being "mere beachcombing." If "mere beachcombing" means making observations and then rearranging these observations in different combinations to come up with a fresh meaning, then that is what Dr. Sargant has accomplished. His historical account of his personal observations leading to his conclusions makes excellent reading.

Among his observations are the endeavors of psychiatrists during World War II to "abreact" suppressed horrible experiences of military personnel and civilians. The use of certain drugs aided in the release of the "abreaction." Dr. Sargant found that evoking a recall of the specific happening was not necessary to mitigate the symptoms. He was able to achieve the same end result by provoking hate and/or fear which in turn would release the emotion suppressed with the specific horrible experience. This reviewer found, during World War II, that knowing the history of untoward happenings of Amphibious Ships and merely making judicious use of this knowledge evoked the "abreactions" which mitigated symptoms.

Dr. Sargant's attention was called to an English translation of Pavlov's work on the "conditioned reflex" in dogs. His observations on religious conversions and "abreactions" of war experiences seemed to combine well with Pavlov's concepts. Pavlov's complex concepts are well described in this book. It may be that Pavlov's ideas will come to have more meaning than they do now but this will not occur until the present fad for a biochemical basis to explain the responses of human beings has run its course.

Pavlov, the author writes, always insisted that experimental facts, however limited in their range, which can be repeatedly tested and checked should take precedence over broader and vaguer psychological speculations. It would seem to me that if one is going to approximate a whole truth, then those ideas and concepts which have the broadest range are more apt to achieve that end.

Dr. Sargant's thesis is to the effect that religious conversions, political conversions, "abreactions," and brainwashing have a similarity. These ends are accomplished by narrowing the perspective of the subjects to such a degree that said subjects will come to accept anything imposed on them. I can concur that this was one very real way of viewing Hitler's methodology as I observed it during the years 1932-34. Hitler's timing in arranging a pageant

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BOOK REVIEWS

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to brain wash the public to such a narrow perspective that they would accept whatever he would impose, was a terrifying experience to observe. There is little doubt that this methodology is effective in displacing a human being's critical faculties.

The author feels that intensive study of these phenomena will aid in the battle of political ideologies which we will be faced with for some time to come. The emphasis then, would be placed on increasing understanding of the breakdown of humain beings. Adolf Meyer was opposed to the tendency to "pathologize" human behavior. Should we not, perhaps, in this period of man's history, study what enables a human being to maintain his wholeness or integration, what enables him to maintain a perspective of a broad range, vague and dependent on belief as such a perspective may be? Should we not advocate strengthening that which represents the best of human nature? It was through Churchill's capacity to maintain a broad perspective, even though a narrower perspective seemed more realistic, that England was able to withstand the stress of the "conditioning" Hitler attempted to effect.

To all physicians faced with human beings in their practice of the healing arts, I commend this book. It will provoke the reader to re-evaluate and, perhaps for some, to word for the first time their outlook on human beings.

HAROLD W. WILLIAMS, M.D.

PSYCHOPATHIC PERSONALITIES by Harold Palmer, M.D. Philosophical Library. N. Y., N. Y. 1957. $4.75

This book is a study of mental ill health and is intended for those concerned with the management of human beings. It portrays psychopathic personalities, schizophrenia, depressive states, obsessions, hysteria, epilepsies, tension syndromes, paranoid states and mania so that they can be well recognized by any one with and probably without clinical experience.

The author stresses physical shock therapy in schizophrenia and melancholia and minimizes psychotherapy in these conditions. He feels that fatigue accentuates paranoid trends and so is to be avoided. He considers it wise to think of hysteria as an "appeal for help."

This book has many theories and many descriptive words which are not factual. However, it contains valuable information from a rich, clinical experience, and the interested reader should profit from it.

WILLIAM NEWTON HUGHES, M.D.

ONE SURGEON'S PRACTICE by Frederick Christopher, M.D. W. B. Saunders Company, Phil., 1957. $4.00

Dr. Christopher has set out to present some personal observations and experiences hoping that they will be of interest to those who might wish to obtain a picture of what a general surgical practice may be and of help especially to those on the lower rungs of the surgical ladder. This he has done in a most enjoyable book. The style is leisurely, almost homespun, and at the same time brief. He has thus been able to offer a wealth of general information and surgical aphorisms (both technical and non-technical) in a pocket sized hard cover of 140 pages.

An understanding of the information Dr. Christopher offers is essential for one planning a career in surgery. The long and arduous training involved, the difficulties in getting started (choice of location and adjustments to local situations, e.g.) and the many pitfalls along the surgical road are among the topics discussed. There are to be found countless and valuable aids suggested for overcoming these obstacles.

In this book we meet and become acquainted with Dr. Christopher, an eminent and accomplished surgeon, a warm and friendly person. We see him ever considerate of the patient's personal feelings. We see him think in terms of the whole patient, his illness, and the effect one has upon the other, rather than in terms of a "lesion." We come to realize as we read that for most of us "success" is measured by our many and oft repeated daily contributions to our patients and our colleagues.

Dr. Christopher has emphasized those aspects of practice which all surgeons should have in common, having culled from his own experiences and accomplishments mainly those situations which the average surgeon encounters. On one or two occasions perhaps does his outlook warrant interpretation. For example, the premedical student is advised to choose his medical school with deliberation, to consider such aspects as the philosophy with which the medical faculty of a particular school has been selected. Indirectly also, a walking or bicycling tour of the continent during the summer before medical school has been recommended. This perspective seems to be slightly out of focus in the light of the problems facing the average, and even the above average, qualified premedical student of the present era. Since the acceptance or rejection of such suggestions is a cut and dried affair for the individual, their presentation does not impair the value of the book as a guide to the premedical student.

Surgeons and prospective surgeons alike will find ONE SURGEON'S PRACTICE both enjoyable and instructive. J. E. CARUOLO, M.D.

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1. Nichols, R. L. and Finland, M.: *J. Clin. Med.* 49:410, 1957.

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Nineteen new titles have been added to the Davenport Collection and are available for circulation:

John B. Blake—BENJAMIN WATERHOUSE AND THE INTRODUCTION OF VACCINATION. A Reappraisal. University of Pennsylvania Press, Phil., 1957.

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Fellows of the Society have given the following items:

From *John T. Barrett, M.D.:* several volumes of the MEDICAL TIMES.

From *Irving Beck, M.D.:* 24 books and several volumes of medical journals.

From *Jarvis D. Case, M.D.:* 72 books and pamphlets.

From *Donald L. DeNyse, M.D.:* 1 book and several volumes of medical journals.
From *John E. Donley, M.D.:* Robert Montraville Green—COMMENTARY ON THE EFFECT OF ELECTRICITY ON MUSCULAR MOTION. A Translation of Luigi Galvani's DE VIRIBUS ELECTRICITATIS IN MOTU MUSCULARI COMMENTARIUS. Elizabeth Licht, Cambridge, Mass., 1953.

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From *Charles L. York, M.D.:* Daniel John Cunningham — STEREOSCOPIC STUDIES OF ANATOMY PREPARED UNDER AUTHORITY OF THE UNIVERSITY OF EDINBURGH. Meadville, Pa., n.d. 10 vols. and stereopticon.

Other Gifts were:

From the *Estate of Roland Hammond, M.D.:* several volumes of medical journals.
From the *Estate of Ira H. Noyes, M.D.:* several volumes of medical journals.

continued on next page

From the *Estate of Malford W. Thewlis, M.D.:* 158 books, pamphlets and medical journals.
From *Mr. Francis L. Corrigan:* 9 books.
From *Mr. John E. Farrell:* 4 books.
From *Mrs. Pasqualina Pezzi:* 46 books.
From *Peters House Library:* several volumes of medical journals.
From the *Veteran Hospital Library:* 3 books and journals.
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Sven Lindstedt—STUDIES ON THE FORMATION AND EXCRETION OF BILE ACIDS. Lund, 1957.

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Nils Johan Nilsson—EIN NEUES OXIMETER . . . Lund, 1957.

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BOOK REVIEWS

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CURRENT SURGICAL MANAGEMENT. A Book of Alternative Viewpoints on Controversial Surgical Problems. Edited by John H. Mulholland, M.D., Edwin H. Ellison, M.D. and Stanley R. Friesen, M.D. W. B. Saunders Co., Phil., 1957. $10.00

Unanimity of opinion in regard to therapeutic approach is unusual in medicine. There are few conditions in which all physicians agree as to the preferred method of treatment. This is especially true in surgery where variant opinions lead to differing and often seemingly opposing approaches. In the United States these differences often become regional in character, and the surgical treatment of a given condition may differ markedly from one surgical center and its sphere of influence to another. In recognition of these facts, and of the need for a forum in which surgical authorities could express their respective viewpoints, the editors of CURRENT SURGICAL MANAGEMENT have produced a volume in which an attempt is made to explain these differences concisely.

By covering a wide variety of topics, and by choosing outstanding surgeons of widely different locales and opinions, a "new type" of surgical text has been produced. This is not a book for the medical student, but one for the advanced surgical resident or practicing surgeon who can evaluate the opinions of others in the light of his own experience, and then "decide for himself" which therapeutic method to apply in a given situation. Thus, widely differing topics such as the treatment of papillary carcinoma of the thyroid, sliding indirect inguinal hernia, appendicitis with generalized peritonitis, and perforated duodenal ulcer, to mention only a few, are presented briefly by the men who advocate varying methods of treatment for these conditions. Each problem is presented in a separate section, and by keeping this volume handy on his desk or bedside table, the reader can snatch a few moments of very profitable reading without first having to wade through lengthy paragraphs of background material and statistics which so often fill more formal reports on these same subjects.

In a text of 480 pages in which an attempt has been made to cover so much material it is obvious that many important and controversial problems must have been excluded. Among the most apparent of these is the absence of sections dealing with peripheral vascular problems. The roles of sympathectomy, arterial grafting, and thromboendarterectomy have created so much controversy in the surgical literature that their exclusion from this text would seem to be a major oversight. In addition there is no discussion of the varying aspects of the treatment of thromboembolic disease, another important and highly controversial topic. It is hoped, however, that the obvious need for a text such as this will encourage the editors and publisher to make the current volume the first of a series of CURRENT SURGICAL MANAGEMENT, and that the above problems and others will be discussed in future editions.

BANICE M. WEBBER, M.D.

DISTRICT MEDICAL SOCIETY MEETINGS

PROVIDENCE MEDICAL ASSOCIATION

A regular meeting of the Providence Medical Association was held at the Rhode Island Medical Society Library on Monday, November 4, 1957.

In the absence of the president, the meeting was called to order at 8:30 P.M. by Doctor Joseph G. McWilliams, Vice-President.

Doctor McWilliams reported that the minutes of the previous meeting of the Association would not be read unless there was a request for the reading, and that they would be published in the RHODE ISLAND MEDICAL JOURNAL. There was no request for a reading.

Report of the Secretary

Doctor Michael DiMaio, secretary, reported to the membership regarding meetings planned by the Staff Association of the Roger Williams General Hospital. He also called to the attention of the membership the program for the Interim Meeting of the Rhode Island Medical Society to be held at the Medical Library on November 13.

Tribute to Doctor E. M. Porter

Doctor McWilliams noted that Doctor Emery M. Porter, a past-president of the Association, had died this day and he called on the members present to stand in a moment of prayer for Doctor Porter.

Presentation of Membership Certificates

Doctor McWilliams presented certificates of active membership in the Association to the physicians who were elected to membership at the October meeting.

Scientific Program

The motion picture film *The Doctor Defendant* produced by the William S. Merrill Company in cooperation with the American Medical Association was shown. After the presentation of the picture, Doctor McWilliams called upon Doctor Francis B. Sargent to preside and to lead the discussion of the subject.

Doctor Sargent, who is chairman of the Rhode Island Medical Society Committee on Medical Defense and Grievance, made a few remarks about medical-legal problems as they pertained to our Association. He emphasized the fine record that the physicians of this community have made in keeping legal problems down to a minimum.

Doctor Charles J. Ashworth, president of the Rhode Island Medical Society Physicians Service, was the second discussant. Doctor Ashworth elaborated on the remarks made by the chairman.

The legal members of the panel, Mr. Charles P. Williamson, Legal Counsel of the Society, and Mr. Francis V. Reynolds, chairman of the Grievance Committee of the Rhode Island Bar Association, emphasized and elaborated on a number of the technical points brought out by the motion picture. Their discussion brought to light many important medical-legal questions and answers that will be very helpful to all physicians.

There was general audience participation after the formal presentations with many interesting questions proposed by members and answered by the medical-legal panel.

"Whitehall 4-1500"

The evening program was concluded with the first showing in Rhode Island of the American Medical Association's new motion picture in color, designed for public distribution under the title *Whitehall 4-1500,* the Chicago telephone number of the American Medical Association.

Adjournment

The meeting adjourned at 10:40 P.M.
Attendance was 118.
Collation was served.

Respectfully submitted,
MICHAEL DIMAIO, M.D., *Secretary*

BRISTOL COUNTY MEDICAL ASSOCIATION

The annual dinner of the Bristol County Medical Association was held at the For'N'Aft Restaurant, Warren, Rhode Island, on November 9, 1957. The occasion was in celebration of the tenth anniversary of its foundation. Doctor Arcadie Guira, president, welcomed thirty-four members, their wives and guests. The ladies were presented with corsages of chrysanthemums made by Mrs. Arcadie Guira with flowers from her own garden.

ULYSSE FORGET, M.D., *Secretary*

Merry Christmas TO OUR ADVERTISERS

RHODE ISLAND

DECEMBER, 1957

Medical Journal

Merry Christmas
and
A Happy New Year

Volume XL, No. 12
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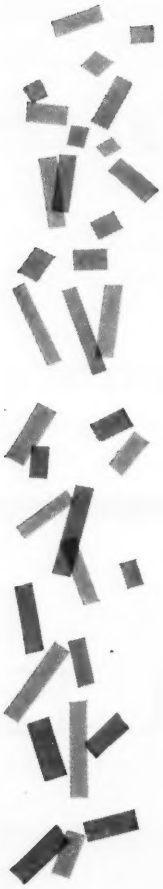

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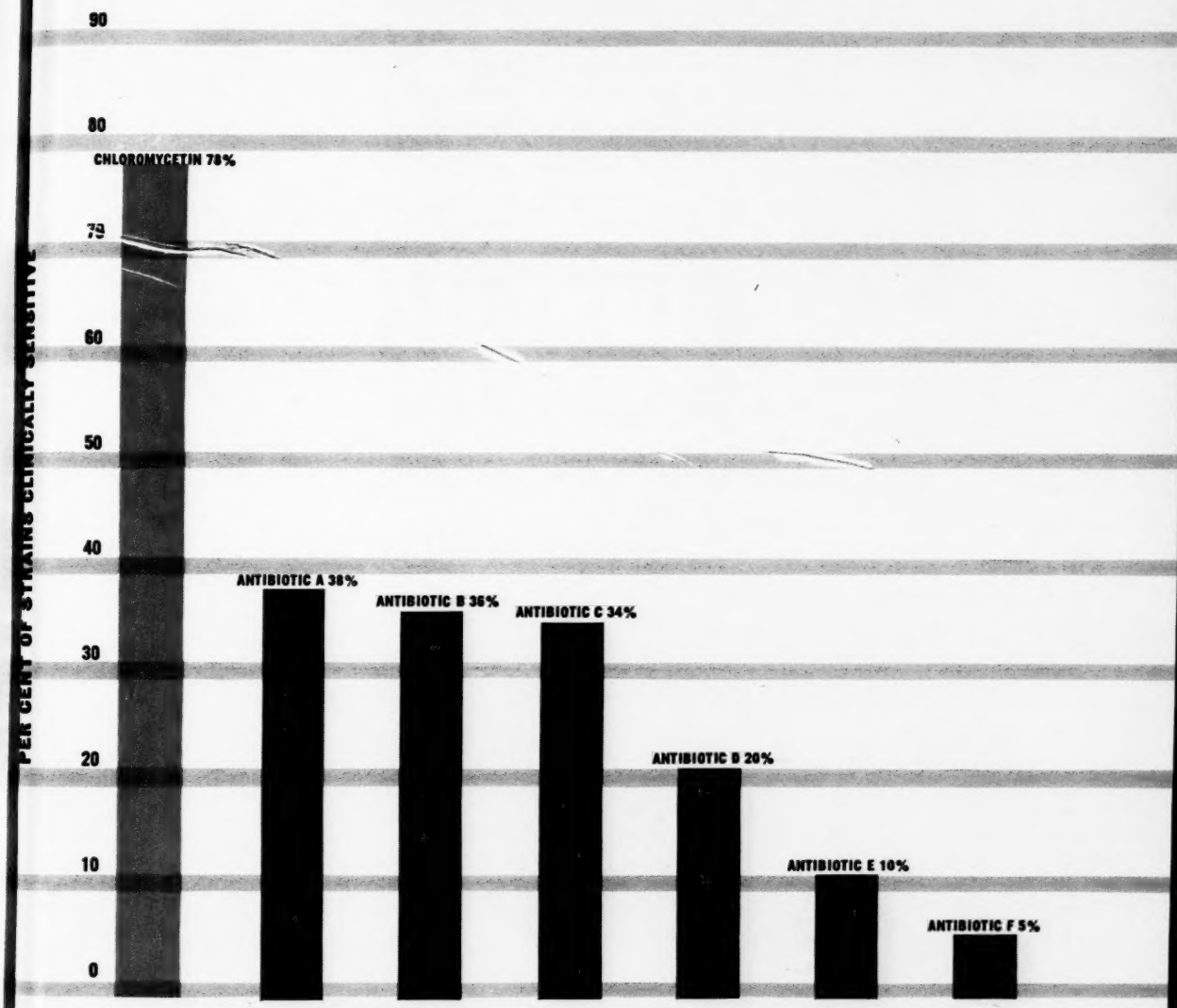

*This graph is adapted from Waisbren and Strelitzer.[15] It represents *in vitro* data obtained with clinical material isolated between the years 1951 and 1956. Inhibitory concentrations, ranging from 3 to 25 mcg. per ml., were selected on the basis of usual clinical sensitivity.

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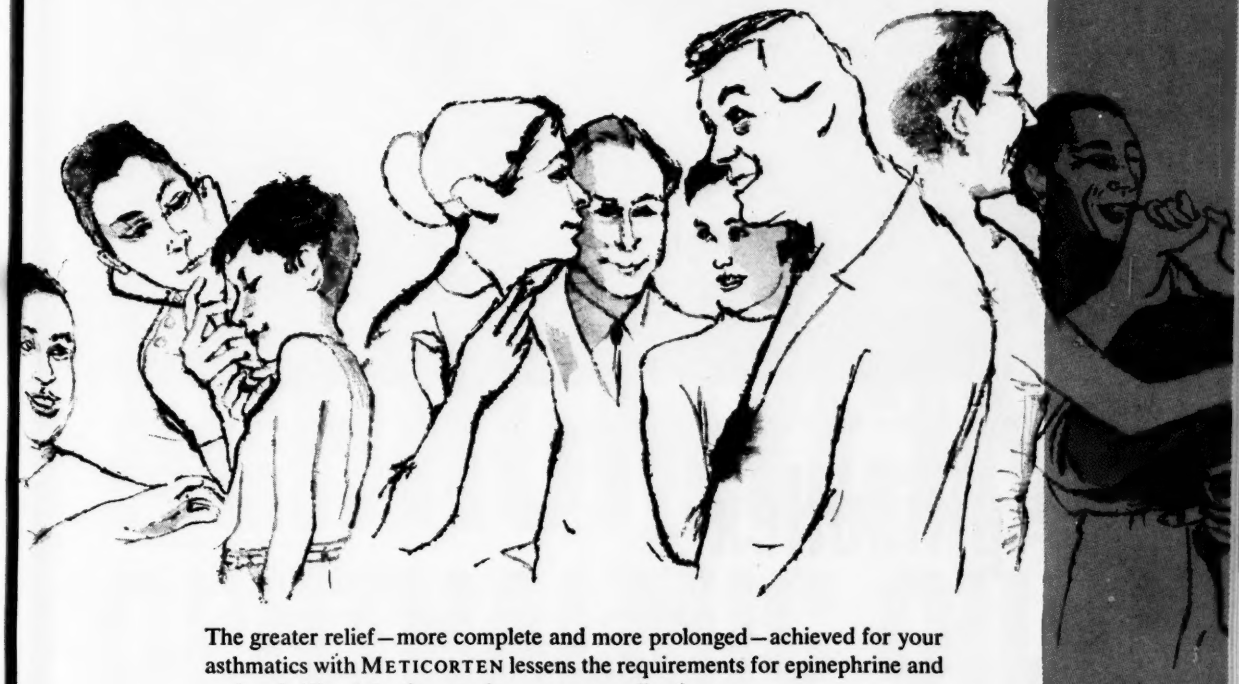

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(1) Feinberg, A. R., and Feinberg, S. M.: J.A.M.A. *160*:264, 1956. (2) Schwartz, E.: J. Allergy *26*:206, 1955. (3) Skaggs, J. T.; Bernstein, J., and Cooke, R. A.: J. Allergy *26*:201, 1955. (4) Barach, A. L.; Bickerman, H. A., and Beck, G. J.: Dis. Chest *27*:515, 1955.

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TABLE OF CONTENTS

Evidence continues to accumulate verifying the effectiveness of Gelatine in the treatment of brittle fingernails. Investigators report that the nails show objective evidence of improvement.[1,2,3,4] Furthermore, patients often volunteer that their nails "feel stronger," "look smoother," and "I can pick up things without them hurting."[1] Evidently the subjective sensations associated with improvement are nearly as important to some patients as the positive physical change in the nails' appearance.

Improvement Noted in 81% of Patients

See the chart below for a summary of the effect of Knox Gelatine in brittle fingernails as observed in all published reports. Photographic evidence of improvement, much of it in color taken before and during treatment, is available for most of the patients.[1,2,3] Please note, however, that where Gelatine was used in the treatment of pathological conditions associated with brittle fingernails only in psoriasis did the data show definite improvement.[1,3,4]

Response to Gelatine in Brittle Fingernails

References	Dosage	Duration of treatment	No. patients w/ brittle nails	No. patients improved	No. patients w/ brittle nails and other pathology	No. patients improved
1. Rosenberg, S., Oster, K. A., Kallos, A. and Burroughs, W.: *A.M.A. Arch. Dermat* 76:330, (September) 1957	7 Gm./day	3 months	**50**	**43** (86%)	**32**[a]	**9**
2. Schwimmer, M. and Mulinos, M. G. *Antibiot. Med. & Clin. Therapy* 4:403, (July) 1957	7.5 Gm./day	11-16 weeks	**18**	**15** (83%)		
3. Rosenberg, S. and Oster, K. A.: *Conn. State Med. J* 19:171, (March) 1955	7 to 21 Gm./day	15 weeks	**36**	**26**[b] (72%)		
4. Tyson, T. L.: *J. Invest. Dermat.* 14:323, (May) 1950	7 Gm./day	13 weeks	**12**	**10**[c] (83%)		
Totals	7-21 Gm.	11-16 weeks	**116**	**94** (81%)	**32**	**9** (28%)

a. Gelatine improved psoriatic nails in 5 out of 12 cases. In onychomycosis and other pathological conditions of the nail it was of no appreciable help.

b. Of the failures, 2 had congenital disease of the nails, 3 were diabetics and 3 took the medication for less than one month.

c. One patient with psoriasis and arthritis and one patient with psoriasiform nail changes showed improvement in 2 and 3 months respectively.

BRITTLE FINGERNAILS

Important Note

The pharmacodynamic effects of Gelatine are manifested through its high Specific Dynamic Action, and therefore, depend upon adequate and prolonged intake. All published clinical research has been conducted using 7 to 21 grams (1-3 envelopes) of Knox Gelatine per day for the three to four months that are required for complete regrowth of the nails. Smaller dosage would induce a lesser specific dynamic action and thus prove ineffectual in correcting the brittle nail defects. More detailed information on brittle fingernails and reprints of the two more recent clinical reports are available on request. Please use the attached coupon.

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Please send reprints of the following articles:

☐ Rosenberg, S., Oster, K. A., Kallos, A. and Burroughs, W.: *A.M.A. Arch. Dermat.* 76:330, (Sept.) 1957.

☐ Schwimmer, M. and Mulinos, M. G.: *Antibiot. Med. & Clin. Therapy* 4:403, (July) 1957.

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mer, J. L., and DeRisio, : *Lahey Clin. Bull.* 10:45, Dec., 1956.

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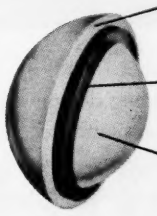

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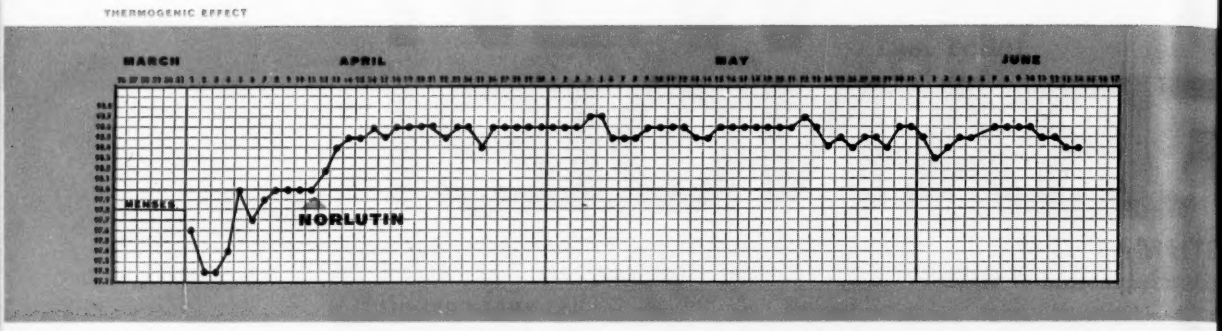

▲When NORLUTIN was administered to patients with uniphasic temperature curves and menstrual irregularities a rise in basal temperature occurred.*

NORLUTIN™

(norethindrone, Parke-Davis)

major advance in female hormone therapy for certain disorders of menstruation and pregnancy

INDICATIONS FOR NORLUTIN: conditions involving deficiency of progestogen, such as primary and secondary amenorrhea, menstrual irregularity, functional uterine bleeding, endocrine infertility, habitual abortion, threatened abortion, premenstrual tension, and dysmenorrhea.

PACKAGING: 5-mg. scored tablets (C. T. No. 882), bottles of 30.

*Greenblatt, R. B.: *J. Clin. Endocrinol.* **16**:869, 1956.

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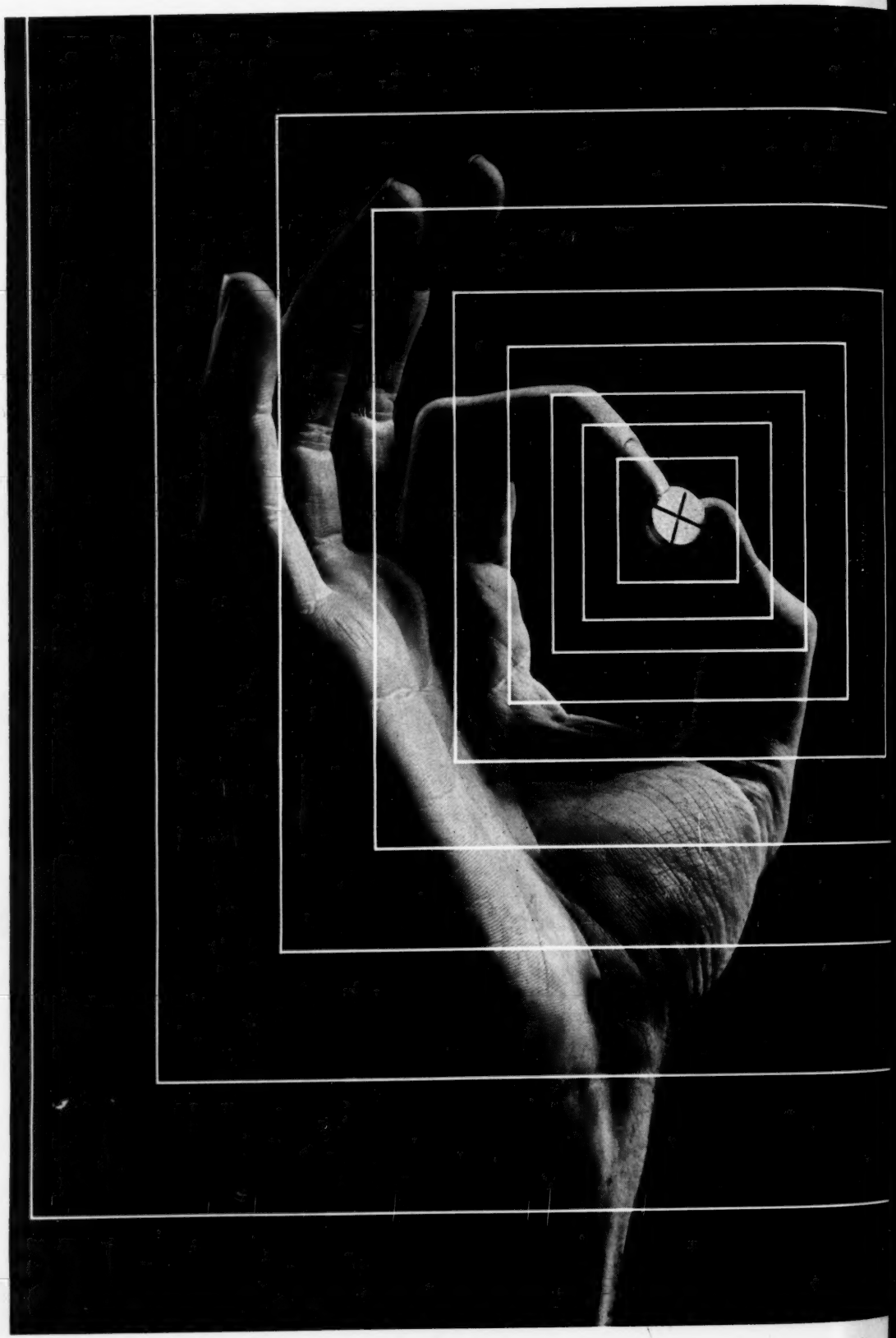


Since 1950...an outstanding record of continuing clinical success in the treatment of infectious diseases

Year after year, Terramycin continues to hold its enviable reputation for reliable performance in the treatment of a wide variety of infections. In the ever-growing literature on its clinical success, Terramycin stands firmly on its record for broad-spectrum efficacy with safety.

TERRAMYCIN®

BRAND OF OXYTETRACYCLINE

Clinical efficacy further confirmed

1957 In a controlled trial for a period of a year at seven centers, in patients with severe bronchiectasis, Terramycin was "... beneficial and was more effective than oral penicillin.... A more pronounced effect in the [Terramycin] group was observed in the reduction of disability expressed by the number of days confined to bed.... The characteristic symptoms of bronchiectasis can be modified and the natural history of the disease influenced whilst [Terramycin] therapy is maintained."[1]

1957 IN PERTUSSIS: "Continued satisfactory results have been maintained with [Terramycin].... The present routine management of these cases consists of a 10 day course of [Terramycin] ... and during the last six years, chiefly with the use of oxytetracycline, the mortality has been reduced...."[2]

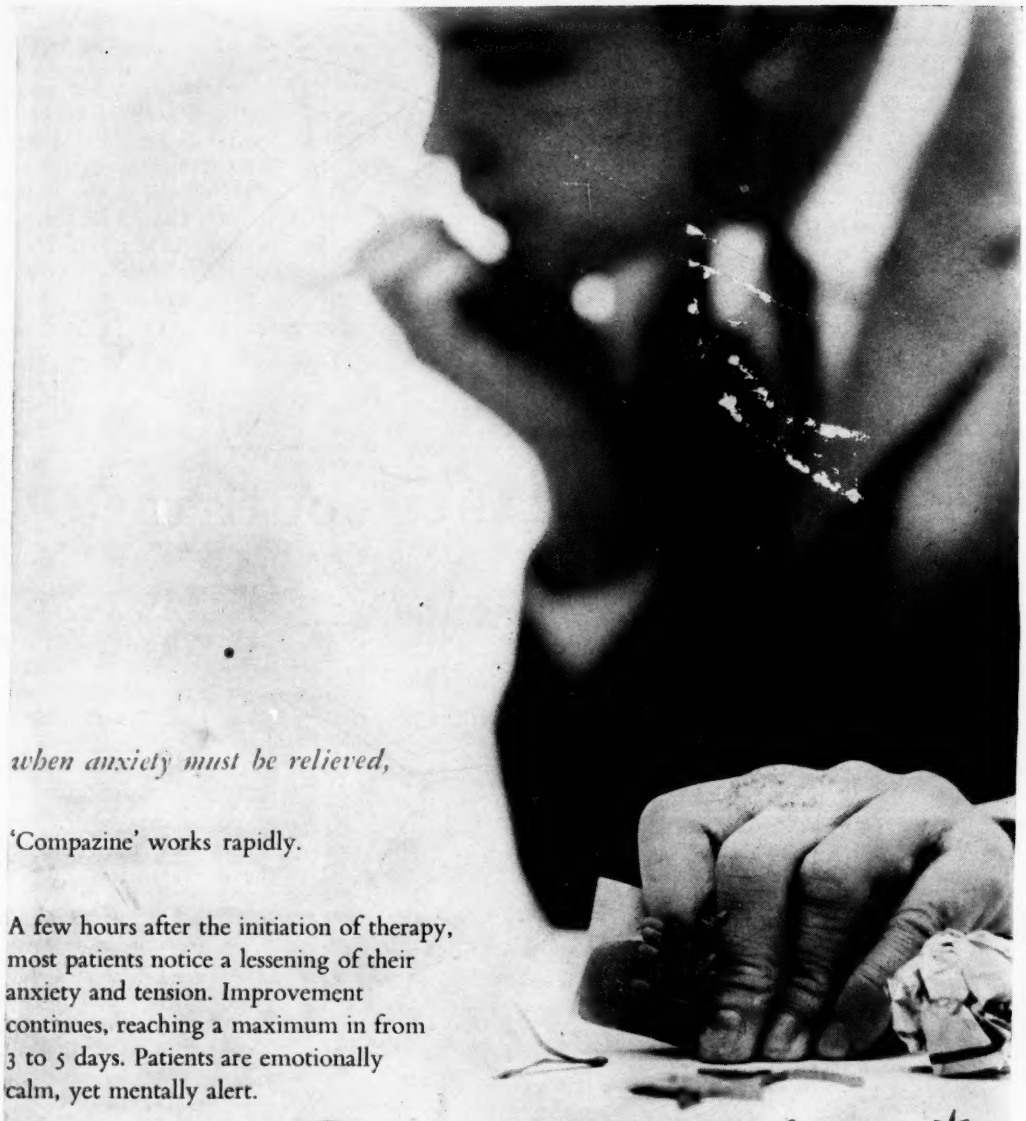
1957 Terramycin "... used with success"[3] in staphylococcal pneumonia and empyema.

AILABLE in a well-tolerated dosage m to cope with every need of d-spectrum therapy: Capsules, ets, taste-tempting liquid tures, special preparations for enteral, topical and ophthalmic , Terrabon® and Terrabon iatric Drops.

rts, C. S., and Knowelden, J.: Brit. , 1:255 (Aug. 3) 1957. 2. Williams, S.: iotics Annual 1956-1957, New York, Medical clopedia, Inc., 1957, p. 316. 3. Forbes, G. B., Emerson, G. L.: Pediatric Clinics of America, Philadelphia, W. B. Saunders 1957, p. 215.

Pfizer

PFIZER LABORATORIES, Brooklyn 6, N. Y.
Division, Chas. Pfizer & Co., Inc.
orld leader in antibiotic development and production



when anxiety must be relieved,

'Compazine' works rapidly.

A few hours after the initiation of therapy, most patients notice a lessening of their anxiety and tension. Improvement continues, reaching a maximum in from 3 to 5 days. Patients are emotionally calm, yet mentally alert.

Compazine★

Available:

Spansule† capsules, 10 mg. and 15 mg.
Tablets, 5 mg. and 10 mg; and, primarily for use in hospitalized psychiatric patients, 25 mg. tablets.
Ampuls, 10 mg. (2 cc.)

S.K.F.'s outstanding tranquilizer

Smith, Kline & French Laboratories, Philadelphia

★T.M. Reg. U.S. Pat. Off. for prochlorperazine, S.K.F.
†T.M. Reg. U.S. Pat. Off. for sustained release capsules, S.K.F.
Patent Applied For

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